

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 A3 20040512 (EN)

Application

EP 99108935 A 19960916

Priority

- EP 96114791 A 19960916
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- JP 25607995 A 19951003
- JP 25608095 A 19951003
- JP 25608395 A 19951003

Abstract (en)

[origin: EP0765959A1] A filament nonwoven fabric and method of fabricating the same. The method comprises the steps of melting a polymer selected from the group consisting of poly(D-lactic acid), poly(L-lactic acid), copolymers of D-lactic acid and L-lactic acid, copolymers of D-lactic acid and hydroxy-carboxylic acid, and copolymers of L-lactic acid and hydroxy-carboxylic acid, said polymer having a melting point of 100 DEG C or more, or a blend of such polymers having a melting point of 100 DEG C or more, said polymer or polymer blend having a melt flow rate of from 10 to 100 g/10 minutes as measured at 190 DEG C. according to ASTM-D-1238 (E), in a temperature range of from (Tm + 20) DEG C to (Tm + 80) DEG C, where Tm DEG C is the melting point of the polymer or polymer blend; extruding the melt through a spinneret into filaments; drafting the extruded filaments by means of a suction device at a drafting speed of from 1,000 to 5,000 m/minute, thereby fining them down into finer filaments; 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

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IPC 8 full level

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CPC (source: EP KR US)

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D04H 3/14 (2013.01 - EP); **D04H 3/147** (2013.01 - KR); **D04H 3/16** (2013.01 - EP)

Citation (search report)

- [DA] EP 0637641 A1 19950208 - FIBERWEB SODOCA SARL [FR]
- [A] EP 0597427 A1 19940518 - MITSUI TOATSU CHEMICALS [JP]
- [A] EP 0530987 A1 19930310 - MITSUI TOATSU CHEMICALS [JP]
- [A] DATABASE WPI Section Ch Week 199442, Derwent World Patents Index; Class A23, AN 1994-338776, XP002272638
- [A] DATABASE WPI Section Ch Week 9435, Derwent World Patents Index; Class A23, AN 94-283801, XP002023666

Cited by

US7824725B2; US7994078B2; WO2004059058A1; EP1612314B2

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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;
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