

Title (en)
Nonwoven fabric and device for making the same

Title (de)
Spinnvliesstoff und Vorrichtung zu dessen Herstellung

Title (fr)
Matériau non-tissé et dispositif de fabrication

Publication
EP 0822284 B1 20001102 (DE)

Application
EP 97108067 A 19970517

Priority
DE 19630523 A 19960729

Abstract (en)
[origin: EP0822284A2] A spun-bonded web comprises monofilaments of polyethylene terephthalate and bi-component filaments of polyethylene terephthalate and a binding polymer material in the form of at least two externally facing segments (2), the content by weight of bi-component filaments varying over the web cross-section from 1 to 100%. This ratio changes through the cross-section planes of the web without noticeable phase boundaries. Also claimed is apparatus for producing the web. It comprises 1 to 40 rectangular spinneret plates (3) or circular discs placed above a drafting device for the filaments leaving the spinneret holes (5), (6), where some holes (5) eject bi-component filaments and others (6) mono-filaments from the smelt. Below the drafting device is a horizontally moving collecting belt on which plane, as viewed in the travel direction, the filaments are projected in an arranged sequence which corresponds to the concentration gradation of the filament mixture in vertical cross-section. I.e. a filament mixture is first laid down which forms an externally facing web surface, subsequently internal web layers are formed in sequence and finally the other externally facing surface layer, all smoothly merging one with another.

IPC 1-7
D04H 3/14; **D04H 3/16**; **D05C 17/02**; **D01D 5/34**

IPC 8 full level
D01D 4/02 (2006.01); **D01D 5/34** (2006.01); **D04H 3/011** (2012.01); **D04H 3/14** (2012.01); **D04H 3/147** (2012.01); **D04H 3/16** (2006.01); **D05C 17/02** (2006.01)

CPC (source: EP KR US)
D04H 3/011 (2013.01 - EP KR US); **D04H 3/02** (2013.01 - KR); **D04H 3/14** (2013.01 - EP US); **D04H 3/147** (2013.01 - EP KR US); **D04H 3/16** (2013.01 - EP US); **Y10T 442/60** (2015.04 - EP US); **Y10T 442/608** (2015.04 - EP US); **Y10T 442/609** (2015.04 - EP US); **Y10T 442/638** (2015.04 - EP US); **Y10T 442/64** (2015.04 - EP US); **Y10T 442/681** (2015.04 - EP US); **Y10T 442/69** (2015.04 - EP US); **Y10T 442/697** (2015.04 - EP US)

Cited by
GB2371011A; GB2371011B; DE102006041772A1; EP1894499A3; DE102006041772B4; EP1154707A4; US7060149B2; US7763295B2; US6207599B1; US6350399B1; WO0015891A1; WO9923285A1; WO2010066142A1; WO0120063A1; US7174612B2; US7175902B2; EP2761070B1

Designated contracting state (EPC)
DE FR GB IT NL SE

DOCDB simple family (publication)
EP 0822284 A2 19980204; **EP 0822284 A3 19980415**; **EP 0822284 B1 20001102**; DE 19630523 C1 19980312; DE 59702560 D1 20001207; JP 2813585 B2 19981022; JP H10102370 A 19980421; KR 100225312 B1 19991015; KR 980009584 A 19980430; MX 9705700 A 19980228; PL 184174 B1 20020930; PL 321389 A1 19980202; TW 348191 B 19981221; US 6053719 A 20000425; US 6274521 B1 20010814

DOCDB simple family (application)
EP 97108067 A 19970517; DE 19630523 A 19960729; DE 59702560 T 19970517; JP 20360097 A 19970729; KR 19970035744 A 19970729; MX 9705700 A 19970728; PL 32138997 A 19970729; TW 86107394 A 19970530; US 51968900 A 20000307; US 90244697 A 19970729