

Title (en)  
Monofilaments modified with perfluoropolymers

Title (de)  
Mit Perfluorpolyethern modifizierte Monofilamente

Title (fr)  
Monofilaments modifiés à l'aide de perfluoropolymères

Publication  
**EP 2135982 A3 20100526 (DE)**

Application  
**EP 09007803 A 20090613**

Priority  
DE 102008028617 A 20080618

Abstract (en)  
[origin: EP2135982A2] The method of producing a monofilament made of a mixture of a melt-spinnable, thread-forming polymer and an additional modifying polymer, comprises spinning the polymer and 0.001-10 wt.% of a perfluorinated polyether such as inert perfluoropolyether liquid into monofilaments. The perfluoropolyether liquid has a molecular weight of 500-6000. The mixture further contains stabilizers such as hydrolysis-, thermal- and/or UV stabilizers, and pigment dyes. The monofilament has a diameter of 0.1-1 mm, and is rotated with a circular-, non-circular-, oval or n-angular cross-section, where n>= 3. An independent claim is included for a monofilament.

IPC 8 full level  
**D01F 6/88** (2006.01); **B29C 48/30** (2019.01); **D01F 6/94** (2006.01)

CPC (source: EP US)  
**D01F 6/88** (2013.01 - EP US); **D01F 6/94** (2013.01 - EP US); **Y10T 428/249921** (2015.04 - EP US); **Y10T 442/30** (2015.04 - EP US)

Citation (search report)  
• [XYI] WO 9108254 A1 19910613 - RESEARCH DEV CORP [US]  
• [YD] EP 0506983 A1 19921007 - TORAY INDUSTRIES [JP]  
• [XD] US 5576095 A 19961119 - UEDA AKIHIKO [JP], et al  
• [XI] WO 2008065164 A1 20080605 - SOLVAY SOLEXIS SPA [IT], et al  
• [AD] EP 0657503 A2 19950614 - AUSIMONT SPA [IT]  
• [T] RÖMPP LEXIKON ONLINE: "Stichwort: Perfluoropolyether (Dokumentkennung RD-16-01001)", 27 April 2007 (2007-04-27), XP002576132, Retrieved from the Internet <URL:<http://www.roempp.com/prod/index1.html>> [retrieved on 20100330]  
• [T] DU PONT LUBRICANTS: "Frequently Asked Questions - Krytox", XP002576133, Retrieved from the Internet <URL:[http://www2.dupont.com/Lubricants/en\\_US/uses\\_apps/faqs\\_krytox.html](http://www2.dupont.com/Lubricants/en_US/uses_apps/faqs_krytox.html)> [retrieved on 20100331]

Cited by  
DE102012221053A1

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 MK MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)  
AL BA RS

DOCDB simple family (publication)  
**EP 2135982 A2 20091223; EP 2135982 A3 20100526**; DE 102008028617 A1 20091224; JP 2010001596 A 20100107;  
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DOCDB simple family (application)  
**EP 09007803 A 20090613**; DE 102008028617 A 20080618; JP 2009144846 A 20090618; US 48552409 A 20090616