

Title (en)
METHOD FOR PRODUCING FINE MONOFILAMENTS CONSISTING OF POLYPROPYLENE, FINE MONOFILAMENTS CONSISTING OF POLYPROPYLENE AND THE USE THEREOF

Title (de)
VERFAHREN ZUR HERSTELLUNG VON FEINEN MONOFILAMENTEN AUS POLYPROPYLEN, FEINE MONOFILAMENTE AUS POLYPROPYLEN SOWIE DEREN VERWENDUNG

Title (fr)
PROCEDE POUR PRODUIRE DES MONOFILAMENTS FINS EN POLYPROPYLENE, MONOFILAMENTS FINS EN POLYPROPYLENE ET LEUR UTILISATION

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Abstract (en)
[origin: WO02086207A1] The invention relates to a method for producing fine monofilaments with an improved abrasion resistance from a polypropylene with a melt fusion index (MFI) 230 DEG C/12.16 kg of 2-16g/10 min to a titer of 5-20 dtex (0.027 mm-0.053mm). According to said method, a compound of 80 to 99.9 wt. % granulate and 20 to 0.1 wt % of an additive is added to the extruder, the melt is spun at a speed of at least 1200 m/min, cooled in an air bath at room temperature, stretched at a temperature of between 110 and 150 DEG C to a titer of 5-20 dtex and wound. The monofilaments consisting of a polypropylene with a melt fusion index (MFI) 230 DEG C/2.16 kg of 2-16g/10 min, improved abrasion resistance and a titer of 5-20 dtex (0.027 mm-0.053mm) have an abrasion resistance ≤ 2 . The monofilaments have a mechanical constant of at least 295 cN/tex and specific tear properties of more than 61.5 cN . cm/dtex with a strength of at least 48 cN/tex and a maximum tensile force extension of less than 45 %. The inventive fine monofilaments are suitable for producing screen textiles without abrasion for filtration and serigraphy.

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