

Title (en)
METHOD FOR MELT-SPINNING, DRAWING, AND WINDING A MULTIFILAMENT THREAD AND A DEVICE FOR PERFORMING THE METHOD

Title (de)
VERFAHREN ZUM SCHMELZSPINNEN, VERSTRECKEN UND AUFWICKELN EINES MULTIFILEN FADENS SOWIE EINE VORRICHTUNG ZUR DURCHFÜHRUNG DES VERFAHRENS

Title (fr)
PROCÉDÉ DE FILAGE À L'ÉTAT FONDU, D'ÉTIRAGE ET DE DÉROULEMENT D'UN FILÉ MULTIFILAMENT, ET PROCÉDÉ D'EXÉCUTION DU PROCÉDÉ

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Abstract (en)
[origin: WO2011009498A1] The invention relates to a method for melt-spinning, drawing, and winding a multifilament thread to form a fully-drawn yarn and to a device for performing the method. First, a plurality of filaments are extruded from a thermoplastic melt, cooled to a temperature below the glass transition temperature of the thermoplastic material, and joined to form a filament bundle by supplying a preparation oil having a water content of at most 8%. Then, the filament bundle is removed by a simple partial wrapping on optionally heated guiding jackets of several driven galettes at a speed above 1,200 m/min. For drawing and subsequent relaxation, the filament bundle is guided at a drawing speed above 3,500 m/min by a simple partial wrapping on the circumference of further heated guiding jackets of driven galettes. For this purpose, the device according to the invention comprises two galette groups having several driven galettes, wherein the first galette group guides the filament bundle in order to remove and/or heat the filament bundle by simple partial wrapping and the second galette group guides the filament bundle in order to draw the filament bundle by simple partial wrapping.

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