

Title (en)

SINGLE YARN, SINGLE YARN PRODUCT, AND PREPARATION METHOD THEREFOR

Title (de)

EINZELFÄDEN, EINZELFÄDENPRODUKT UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)

FIL SIMPLE, PRODUIT EN FIL SIMPLE ET PROCÉDÉ DE PRÉPARATION CORRESPONDANT

Publication

**EP 3012358 A4 20170405 (EN)**

Application

**EP 13887549 A 20130620**

Priority

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Abstract (en)

[origin: EP3012358A1] The invention relates to a single yarn, a single yarn product and a preparation method thereof, wherein the preparation method of the single yarn comprises: converging or converging and twisting an ultra high molecular weight polyethylene thin film or strip to obtain the single yarn. The single yarn product comprises at least a body prepared from the above-mentioned single yarn. The single yarn obtained by converging or converging and twisting the ultra high molecular weight polyethylene thin films or strips in the invention replaces traditional ultra high molecular weight polyethylene fibers to develop and prepare various products. In addition to the advantages of wear resistance, impact resistance, corrosion resistance, UV resistance and the like which are similar to those of the ultra high molecular weight polyethylene fibers, the single yarn also has the unique advantages of good structural integrity, high strength, high strength utilization ratio, high production efficiency, low processing cost, light weight, small linear density and the like, and therefore the single yarn can replace the traditional ultra high molecular weight polyethylene fibers in the preparation of various products and has a very wide application range.

IPC 8 full level

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Citation (search report)

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- [XI] US 5479952 A 19960102 - ZACHARIADES ANAGNOSTIS E [US], et al
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- [XI] WO 2008048301 A2 20080424 - HONEYWELL INT INC [US], et al
- [XI] WO 2011154383 A1 20111215 - DSM IP ASSETS BV [NL], et al
- [A] US 8206810 B1 20120626 - HARDING KENNETH C [US], et al
- See also references of WO 2014201652A1

Designated contracting state (EPC)

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CA 2914513 C 20180424; CN 205974773 U 20170222; EA 031117 B1 20181130; EA 201592114 A1 20160630; JP 2016527409 A 20160908;  
KR 20160012193 A 20160202; US 2016145775 A1 20160526; WO 2014201652 A1 20141224

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US 201314900135 A 20130620