

Title (en)
ARTICLES OF HIGHLY ORIENTED POLYOLEFINS OF ULTRAHIGH MOLECULAR WEIGHT, PROCESS FOR THEIR MANUFACTURE, AND THEIR USE

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EP 0311197 A3 19900328 (EN)

Application
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Abstract (en)
[origin: EP0311197A2] The invention relates to articles consisting of highly oriented polyolefins having an ultrahigh molecular weight of more than 600,000 g/mol (weight-average molecular weight), especially filaments, fibers, yarns, fabrics and films, having good wetting and adhesive properties, especially on conventional matrix materials, which have been subjected to a plasma treatment of their surface, and also to a process for producing these articles and to their use for the manufacture of composites with the use of conventional matrix materials. In these composites, yarns according to the invention, for example, show a substantially higher adhesive strength than corresponding yarns which have not been plasma-treated, their tensile strength not being impaired by the plasma treatment.

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Citation (search report)
• [XD] EP 0062491 A2 19821013 - UNIV LEEDS IND SERVICE LTD [GB], et al
• [A] FR 1510883 A 19680126 - RADIATION RES CORP
• [X] CHEMICAL ABSTRACTS, vol. 106, no. 24, June 1987, abstract no. 197744g, Columbus, Ohio, US; V. SZILVOVA: "Effect of low-temperature plasma on the properties of polypropylene", & TEXT. CHEM. 1986, 16(1), 58-65

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