

Title (en)

BICOMPONENT FIBERS AND METHODS FOR MAKING THEM

Title (de)

BIKOMPONENTENFASERN UND VERFAHREN ZU IHRER HERSTELLUNG

Title (fr)

FIBRES BICOMPOSANTES ET PROCÉDÉS DE LEUR FABRICATION

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Application

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Abstract (en)

[origin: WO2012064469A1] The present invention relates to bicomponent polymer fibers, and to processes for forming those fibers. Bicomponent polymer fibers are described, having a core comprising a core polymer and a sheath comprising a sheath polymer, wherein the sheath polymer is a polyolefm having an Mw less than about 65,000 g/mol. The core polymer has an Mw at least about 20,000 g/mol greater than the Mw of the sheath polymer. Processes for forming bicomponent fibers are also described, comprising (i) forming a molten blend of a core polymer and a sheath polymer; (ii) extruding the molten polymer blend using an extrusion die having a length to diameter ratio greater than or equal to about 10 and under shear conditions sufficient to drive the sheath polymer to the die wall; and (iii) forming meltblown fibers having a core comprising the core polymer and a sheath comprising the sheath polymer.

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