

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

Publication  
**EP 2638190 A1 20130918 (EN)**

Application  
**EP 11779287 A 20111018**

Priority

- US 41149710 P 20101109
- US 2011056736 W 20111018

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.

IPC 8 full level  
**D01D 5/06** (2006.01); **D01F 6/46** (2006.01); **D01F 8/06** (2006.01)

CPC (source: EP US)  
**D01D 5/0985** (2013.01 - EP US); **D01D 5/40** (2013.01 - EP US); **D01F 1/00** (2013.01 - US); **D01F 6/46** (2013.01 - EP US); **D01F 8/06** (2013.01 - EP US); **Y10T 428/2929** (2015.01 - EP US); **Y10T 442/3154** (2015.04 - EP US)

Citation (search report)  
See references of WO 2012064469A1

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)  
**WO 2012064469 A1 20120518; WO 2012064469 A8 20120920**; CN 103201416 A 20130710; CN 103201416 B 20160706; EP 2638190 A1 20130918; EP 2638190 B1 20150422; JP 2014502315 A 20140130; JP 5722456 B2 20150520; US 2014323003 A1 20141030

DOCDB simple family (application)  
**US 2011056736 W 20111018**; CN 201180053686 A 20111018; EP 11779287 A 20111018; JP 2013538740 A 20111018; US 201113879997 A 20111018