

Title (en)

PROCESS FOR MANUFACTURING ULTRA-HIGH MOLECULAR WEIGHT POLYETHYLENE CATALYST

Title (de)

VERFAHREN ZUR HERSTELLUNG EINES KATALYSATORS AUS POLYETHYLEN MIT ULTRAHOHEM MOLEKULARGEWICHT

Title (fr)

PROCÉDÉ POUR LA FABRICATION D'UN CATALYSEUR POUR LA FABRICATION DE POLYÉTHYLÈNE DE MASSE MOLÉCULAIRE TRÈS ÉLEVÉE

Publication

**EP 2438092 A1 20120411 (EN)**

Application

**EP 10724461 A 20100602**

Priority

- EP 2010057697 W 20100602
- EP 09161961 A 20090604
- EP 10724461 A 20100602

Abstract (en)

[origin: WO2010139720A1] The present invention pertains to a process for manufacturing an ultra-high molecular weight polyethylene, wherein olefin monomers are contacted with a catalytic system under polymerisation conditions under formation of a polyethylene, wherein the catalytic system comprises an active component on a particulate carrier in a site density in the range of  $5 \cdot 10^{-9}$  to  $5 \cdot 10^{-6}$  mole of catalytic sites per m<sup>2</sup> of carrier surface area, the particulate carrier having an average particle diameter in the range of 1-300 nm, wherein the polyethylene has a weight average molecular weight (Mw) of at least 500 000 gram/mole, and an elastic shear modulus G0 N, determined directly after melting at 160°C of at most 1.4 MPa.

IPC 8 full level

**C08F 4/64** (2006.01); **C08F 10/02** (2006.01)

CPC (source: EP)

**C08F 10/00** (2013.01); **C08F 10/02** (2013.01); **C08F 110/02** (2013.01); **D07B 1/025** (2013.01); **C08F 4/65912** (2013.01); **D07B 2201/2009** (2013.01); **D07B 2205/2014** (2013.01)

C-Set (source: EP)

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4. **C08F 10/00** + **C08F 4/64048**
5. **D07B 2205/2014** + **D07B 2801/10**

Citation (search report)

See references of WO 2010139720A1

Citation (examination)

- EP 1561726 A1 20050810 - NANOCYL SA [BE]
- EP 0685494 A1 19951206 - DANUBIA PETROCHEM POLYMERE [AT]

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