

Title (en)
ARTIFICIAL TURF FIBER FROM RENEWABLE POLYETHYLENE

Title (de)
KUNSTRASENFASER AUS ERNEUERBARER POLYETHYLENE

Title (fr)
FIBRE DE GAZON ARTIFICIEL À PARTIR D'UN POLYETHYLENE RENOUVELABLE

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Application
EP 16196633 A 20161031

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Abstract (en)
The invention relates to a method of manufacturing artificial turf (200), the method comprising: - creating (102) a polymer mixture (300, 400, 500) comprising #c a first polymer (304; 404;504) in an amount of at least 57% by weight of the polymer mixture, wherein a portion (304, 404, 506) of at least 30 % by weight of the first polymer is made from the renewable carbon source; and #c a second polymer (302; 402, 502) in an amount of at least 8 % by weight of the polymer mixture, the second polymer being HDPE; - extruding (104) the polymer mixture; - generating (106) the artificial turf fibers (202) from the extruded polymer mixture.

IPC 8 full level
D01F 6/46 (2006.01); **E01C 13/08** (2006.01)

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Citation (applicant)

- EP 1378592 A1 20040107 - TEN CATE THIOLON BV [NL], et al
- WO 2006066777 A1 20060629 - INNOVENE MFG BELGIUM NV [BE], et al
- WO 2008113566 A2 20080925 - BOREALIS TECH OY [FI], et al
- WO 2008098905 A2 20080821 - TESSITURE PIETRO RADICI S P A [IT], et al
- WO 2011134897 A2 20111103 - BASELL POLYOLEFINE GMBH [DE], et al
- WO 2012005974 A1 20120112 - DOW GLOBAL TECHNOLOGIES LLC [US], et al
- DENISE FAN; DER-JONG DAI; HO-SHING WU: "Ethylene formation by catalytic dehydration of ethanol: industrial considerations", MATERIALS, vol. 6, 2013, pages 101 - 115, XP055190432, DOI: doi:10.3390/ma6010101
- G. CHEN; S. LI; F. JIAO; Q. YUAN: "Catalytic dehydration of bioethanol to ethylene over TiO2/y-Al2O3 catalysts in microchannel reactors", CATALYSIS TODAY, vol. 125, 2007, pages 111 - 119, XP022136563

Citation (search report)

- [ID] WO 2012005974 A1 20120112 - DOW GLOBAL TECHNOLOGIES LLC [US], et al
- [I] JP H11269811 A 19991005 - DIATEX KK
- [I] EP 2039831 A1 20090325 - DOMO ZELE NV [BE]
- [I] EP 1837423 A1 20070926 - DOMO ZELE NV [BE]
- [A] US 2011120902 A1 20110526 - BOSWELL EMILY CHARLOTTE [US], et al

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