

Title (en)

ARTIFICIAL TURF FIBER WITH A CORE-CLADDING STRUCTURE COMPRISING AN AGED POLYMER

Title (de)

KUNSTRASENFASER MIT KERNÜBERZUGSSTRUKTUR MIT EINEM GEALTERTEN POLYMER

Title (fr)

FIBRE DE GAZON ARTIFICIEL COMPRENANT UNE STRUCTURE ÂME-GAINAGE COMPRENANT UN POLYMÈRE VIEILLI

Publication

EP 3604638 B1 20200708 (EN)

Application

EP 18186328 A 20180730

Priority

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Abstract (en)

[origin: EP3604638A1] A method for producing an artificial turf fiber (710) from plastic waste (104), The method comprises :- providing (402) an unaged polymer (102);- providing (404) plastic waste (104) comprising one or more aged polymers, the one or more aged polymers comprising at least one aged polymer that is immiscible with the unaged polymer;- melting and mixing (406) the plastic waste and the unaged polymer for preparing a liquid core polymer mixture (100, 200, 300, 350), the liquid core polymer mixture comprising a core polymer phase (106, 302, 902) and a thread polymer phase (108, 802), the thread polymer phase forming beads within the core polymer phase, the thread polymer phase comprising one or more of the aged polymers that are immiscible with the unaged polymer, the core polymer comprising the unaged polymer or comprising a blend of the unaged polymer and one or more further ones of the aged polymers that are miscible with the unaged polymer;- coextruding (408) the liquid core polymer mixture with a liquid cladding polymer (904) into a monofilament (900, 950), the liquid core polymer mixture forming a cylindrical core, the liquid cladding polymer forming a cladding (904) encompassing the core; and- providing (410) one or more of the monofilaments as the artificial turf fiber (710).

IPC 8 full level

D01D 5/34 (2006.01); **D01F 6/46** (2006.01); **D01F 8/06** (2006.01); **E01C 13/08** (2006.01); **D01D 5/253** (2006.01)

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