

## Title (en)

Synthetic fiber for artificial turf system

## Title (de)

Kunststofffaser für einen Kunstrasenbelag

## Title (fr)

Fibre synthétique pour un revêtement de pelouse artificielle

## Publication

**EP 2520696 A1 20121107 (DE)**

## Application

**EP 12005285 A 20100511**

## Priority

- EP 12005285 A 20100511
- EP 10004948 A 20100511

## Abstract (en)

Plastic fiber (2) for artificial turf covering comprises a first plastic component (4) and a second plastic component (6) embedded in the first plastic component, where the second plastic component exhibits a higher resilience than the first plastic component and is formed in the form of at least two strands (8a) extending in the longitudinal direction of the plastic fiber. The plastic fiber exhibits essentially a shape in cross-section having a first symmetrical axis and a second symmetrical axis extending perpendicular to the first axis of symmetry. Plastic fiber for artificial turf covering comprises a first plastic component (4) and a second plastic component (6) embedded in the first plastic component, where the second plastic component exhibits a higher resilience than the first plastic component and is formed in the form of at least two strands (8a) extending in the longitudinal direction of the plastic fiber. The plastic fiber exhibits essentially a shape in cross-section having a first symmetrical axis and a second symmetrical axis extending perpendicular to the first axis of symmetry, where the extension in the direction of the second symmetrical axis is less than the extension in the direction of the first symmetrical axis. An independent claim is also included for the artificial turf comprising a flat support and utilizable pile that is formed from pile threads connected with the support, where the pile threads of utilizable pile are formed at least partially from the plastic fiber.

## Abstract (de)

Die Erfindung betrifft eine Kunststofffaser für einen Kunstrasenbelag umfassend eine erste Kunststoffkomponente (4) und eine in der ersten Kunststoffkomponente (4) eingebettete zweite Kunststoffkomponente (6). Erfindungsgemäss weist die zweite Kunststoffkomponente (6) ein höheres Rückstellvermögen als die erste Kunststoffkomponente (4) auf und ist in Form von mindestens zwei in Längsrichtung der Kunststofffaser verlaufenden Strängen (8a-8e) ausgebildet. Die Kunststofffaser ist dadurch gekennzeichnet, dass sie im Querschnitt im Wesentlichen eine Form mit einer ersten Symmetrieachse (A) und einer rechtwinklig zur ersten Symmetrieachse verlaufenden zweiten Symmetrieachse (B) aufweist, wobei die Ausdehnung in Richtung der zweiten Symmetrieachse (B) geringer ist als die Ausdehnung in Richtung der ersten Symmetrieachse (A).

## IPC 8 full level

**D01F 6/46** (2006.01); **D01F 8/06** (2006.01); **D01F 8/12** (2006.01); **E01C 13/08** (2006.01)

## CPC (source: EP)

**D01D 5/253** (2013.01); **D01D 5/36** (2013.01); **D01F 8/06** (2013.01); **D01F 8/12** (2013.01)

## Citation (applicant)

- EP 1696077 A1 20060830 - TIARA TEPPICHBODEN AG [CH]
- DE 10307174 A1 20040902 - MOTECH GMBH TECHNOLOGY & SYSTE [DE]
- US 2001033902 A1 20011025 - SEATON REED J [US]
- EP 0901478 A1 19990317 - BAYER AG [DE]

## Citation (search report)

- [A] US 2004045145 A1 20040311 - WANG CHING-TANG [TW], et al
- [A] EP 2161374 A1 20100310 - MOTECH GMBH TECHNOLOGY & SYSTE [DE]
- [A] JP H09220781 A 19970826 - DIATEX KK
- [A] WO 2004027130 A1 20040401 - FIBERVISIONS AS [DK], et al

## 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 SE SI SK SM TR

## DOCDB simple family (publication)

**EP 2395135 A1 20111214**; **EP 2395135 B1 20120725**; EP 2520696 A1 20121107; EP 2520696 B1 20140226; ES 2391253 T3 20121122; ES 2452523 T3 20140401

## DOCDB simple family (application)

**EP 10004948 A 20100511**; EP 12005285 A 20100511; ES 10004948 T 20100511; ES 12005285 T 20100511