

Title (en)

BICOMPONENT FIBERS INCLUDING ETHYLENE/ALPHA-OLEFIN INTERPOLYMERS

Title (de)

BIKOMPONENTENFASERN MIT ETHYLEN/ALPHA-OLEFIN-INTERPOLYMEREN

Title (fr)

FIBRES BICOMPOSÉES COMPRENNANT DES INTER-POLYMIÈRES D'ÉTHYLÈNE/ALPHA-OLÉFINE

Publication

EP 4146850 A1 20230315 (EN)

Application

EP 21728382 A 20210506

Priority

- US 202063021790 P 20200508
- US 2021031010 W 20210506

Abstract (en)

[origin: WO2021226300A1] Provided are bicomponent fibers. The bicomponent fiber comprises a first region and a second region. The first region comprises a first ethylene/alpha-olefin interpolymer, and the second region comprises a second ethylene/alpha-olefin interpolymer. The first ethylene/alpha-olefin interpolymer has a highest peak melting temperature (T_m) less than 130°C and at least 3.5°C greater than a highest peak melting temperature of the second ethylene/alpha-olefin interpolymer. The bicomponent fibers can be used for forming nonwovens that in aspect have improved tensile strength, elongation at break, and/or abrasion resistance.

IPC 8 full level

D01D 5/34 (2006.01); **C08L 23/08** (2006.01); **D01F 8/06** (2006.01); **D04H 3/007** (2012.01)

CPC (source: EP KR US)

D01D 5/34 (2013.01 - EP KR US); **D01F 8/06** (2013.01 - EP KR US); **D04H 1/4291** (2013.01 - US); **D04H 1/43828** (2020.05 - US);
D04H 1/44 (2013.01 - US); **D04H 3/007** (2013.01 - EP KR); **D04H 3/147** (2013.01 - EP KR); **D10B 2321/02** (2013.01 - US)

Citation (search report)

See references of WO 2021226300A1

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

Designated extension state (EPC)

BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

WO 2021226300 A1 20211111; AR 122466 A1 20220914; BR 112022022450 A2 20221220; CN 115516142 A 20221223;
EP 4146850 A1 20230315; JP 2023524203 A 20230609; KR 20230009910 A 20230117; US 2023257919 A1 20230817

DOCDB simple family (application)

US 2021031010 W 20210506; AR P210101205 A 20210504; BR 112022022450 A 20210506; CN 202180033440 A 20210506;
EP 21728382 A 20210506; JP 2022564106 A 20210506; KR 20227042284 A 20210506; US 202117996970 A 20210506