

Title (en)

EXTRUDED POLYVINYL ALCOHOL FIBRES AND FIBROUS PRODUCTS

Title (de)

EXTRUDIERTE POLYVINYALKOHOLFASERN UND FASERPRODUKTE

Title (fr)

FIBRES D'ALCOOL POLYVINYLIQUE EXTRUDÉES ET PRODUITS FIBREUX

Publication

**EP 4321665 A1 20240214 (EN)**

Application

**EP 22190330 A 20220813**

Priority

EP 22190330 A 20220813

Abstract (en)

A method of manufacture of a nonwoven product comprising polyvinyl alcohol fibres, the method comprising the steps of: providing a polyvinyl alcohol composition comprising homopolymeric polyvinyl alcohol having a degree of hydrolysis of 88% to 98% or greater; and a molecular weight in the range from 22,000 to 38,000; a plasticiser selected from the group consisting of: sugar alcohols, diols, triols, polyols and mixtures thereof; and a stabilizer selected from the group consisting of: sodium stearate, potassium oleate, sodium benzoate, calcium stearate, stearic acid, dimethyl propionic acid and mixtures thereof; melting the composition at a temperature from 220°C to 230°C; extruding the melted composition to form an extrudate; forming the extrudate into molten fibres; and allowing the molten fibres to solidify to form solid fibres; and drawing the molten fibres to form individual solid fibres or bundles of solid fibres.

IPC 8 full level

**D04H 1/56** (2006.01); **D01D 5/08** (2006.01); **D04H 3/007** (2012.01); **D04H 3/033** (2012.01); **D04H 3/105** (2012.01); **D04H 3/11** (2012.01); **D04H 3/12** (2006.01); **D04H 3/14** (2012.01); **D04H 3/16** (2006.01)

CPC (source: EP)

**D01D 5/08** (2013.01); **D01D 5/0985** (2013.01); **D01D 5/16** (2013.01); **D01F 1/10** (2013.01); **D01F 6/14** (2013.01); **D04H 1/56** (2013.01); **D04H 3/007** (2013.01); **D04H 3/033** (2013.01); **D04H 3/105** (2013.01); **D04H 3/11** (2013.01); **D04H 3/12** (2013.01); **D04H 3/14** (2013.01); **D04H 3/16** (2013.01)

Citation (applicant)

- WO 2017046361 A1 20170323 - AQUAPAK POLYMERS LTD [GB]
- WO 2022008521 A1 20220113 - AQUAPAK POLYMERS LTD [GB]
- WO 2022008516 A1 20220113 - AQUAPAK POLYMERS LTD [GB]

Citation (search report)

- [Y] US 2017369693 A1 20171228 - MORRIS PETER [GB]
- [Y] US 3997489 A 19761214 - COKER JAMES NEWTON
- [A] US 2022228305 A1 20220721 - BRIDEWELL VICTORIA [US], et al
- [A] WO 2021067474 A1 20210408 - MONOSOL LLC [US]
- [A] WO 2021262929 A1 20211230 - MONOSOL LLC [US]

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)

**EP 4321665 A1 20240214**; EP 4321666 A1 20240214; WO 2024037987 A1 20240222

DOCDB simple family (application)

**EP 22190330 A 20220813**; EP 2023072322 W 20230811; EP 23191132 A 20230811