

Title (en)  
NONWOVEN FABRIC

Title (de)  
VLIESSTOFF

Title (fr)  
NON-TISSÉ

Publication  
**EP 3779013 A4 20211229 (EN)**

Application  
**EP 19774470 A 20190313**

Priority  
• JP 2018067712 A 20180330  
• JP 2019010192 W 20190313

Abstract (en)  
[origin: US2021010175A1] A nonwoven fabric that is fabricated is described, which includes a non-melting fiber A having a high-temperature shrinkage rate of 3% or less and a thermal conductivity conforming to ISO22007-3 (2008) of 0.060 W/m·K or less and a thermoplastic fiber B having a LOI value conforming to JIS K 7201-2 (2007) of 25 or more and having a density of more than 50 kg/m<sup>3</sup> and less than 200 kg/m<sup>3</sup>, where the nonwoven fabric exhibits high flame-shielding performance and has a heat insulating property.

IPC 8 full level  
**D04H 1/4382** (2012.01); **D04H 1/4326** (2012.01); **D04H 1/4342** (2012.01); **D04H 1/44** (2006.01); **D04H 1/46** (2012.01); **D04H 1/492** (2012.01); **D04H 1/74** (2006.01)

CPC (source: EP KR US)  
**D04H 1/4326** (2013.01 - EP); **D04H 1/4342** (2013.01 - EP KR); **D04H 1/435** (2013.01 - US); **D04H 1/4366** (2013.01 - US); **D04H 1/43835** (2020.05 - EP KR US); **D04H 1/44** (2013.01 - EP); **D04H 1/46** (2013.01 - EP); **D04H 1/492** (2013.01 - EP); **D04H 1/498** (2013.01 - US); **D04H 1/74** (2013.01 - EP)

Citation (search report)  
• [X] US 2002182967 A1 20021205 - ERB DAVID F [US], et al  
• [I] JP 2013169996 A 20130902 - JAPAN VILENE CO LTD  
• [A] WO 2017006807 A1 20170112 - TORAY INDUSTRIES [JP]  
• [T] ANONYMOUS: "Polybenzimidazole\_fiber", 22 January 2021 (2021-01-22), XP055861728, Retrieved from the Internet <URL:https://www.chemeurope.com/en/encyclopedia/Polybenzimidazole\_fiber.html> [retrieved on 20211115]  
• See references of WO 2019188275A1

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

DOCDB simple family (publication)  
**US 2021010175 A1 20210114**; BR 112020017638 A2 20210309; CN 111918994 A 20201110; EP 3779013 A1 20210217; EP 3779013 A4 20211229; JP 7172998 B2 20221116; JP WO2019188275 A1 20210212; KR 20200138185 A 20201209; SG 11202008253X A 20200929; TW 201942435 A 20191101; WO 2019188275 A1 20191003

DOCDB simple family (application)  
**US 201916978272 A 20190313**; BR 112020017638 A 20190313; CN 201980021828 A 20190313; EP 19774470 A 20190313; JP 2019010192 W 20190313; JP 2019519424 A 20190313; KR 20207025329 A 20190313; SG 11202008253X A 20190313; TW 108110513 A 20190326