

Title (en)

FLAME-RETARDANT POLYAMIDE COMPOSITIONS WITH A HIGH GLOW WIRE IGNITION TEMPERATURE AND USE THEREOF

Title (de)

FLAMMHEMMENDE POLYAMIDZUSAMMENSENZUNGEN MIT HOHER GLÜHDRAHTENTZÜNDUNGSTEMPERATUR UND DEREN VERWENDUNG

Title (fr)

COMPOSITIONS DE POLYAMIDE IGNIFUGES AYANT UNE TEMPÉRATURE D'INFLAMMATION DE FILAMENT ÉLEVÉE ET LEUR UTILISATION

Publication

EP 3665220 A1 20200617 (DE)

Application

EP 18752741 A 20180808

Priority

- DE 102017214048 A 20170811
- EP 2018071445 W 20180808

Abstract (en)

[origin: WO2019030252A1] The invention relates to flame-retardant polyamide compositions with a high glow wire ignition temperature of at least 775 °C, containing a polyamide having a melting point of less than or equal to 290 °C as component A, fillers and/or reinforcing materials as component B, phosphinic acid salt of formula (I) as component C, wherein R1 and R2 represent ethyl, M represents Al, Fe, TiOp or Zn, m represents 2 to 3, and p = (4 - m) / 2, a compound selected from the group of Al, Fe, TiOp or Zn salts of ethyl butylphosphinic acid, dibutylphosphinic acid, ethylhexylphosphinic acid, butylhexylphosphinic acid and/or of dihexylphosphinic acid as component D, phosphonic acid salt of formula (II) as component E, wherein R3represents ethyl, Met represents Al, Fe, TiOp or Zn, n represents 2 to 3, and q = (4 - n) / 2, and a melamine polyphosphate having an average degree of condensation of 2 to 200 as component F. The polyamide compositions can be used to produce fibers, films, and moulded bodies, in particular for applications in the electrical and electronics fields.

IPC 8 full level

C08K 3/32 (2006.01); **C08K 5/134** (2006.01); **C08K 5/3492** (2006.01); **C08K 5/526** (2006.01); **C08K 5/5313** (2006.01); **C08K 5/5317** (2006.01); **C08K 5/5393** (2006.01); **C08K 7/14** (2006.01); **C08L 67/02** (2006.01); **C08L 77/02** (2006.01); **C08L 77/06** (2006.01)

CPC (source: CN EP KR US)

C08G 69/26 (2013.01 - US); **C08J 5/043** (2013.01 - EP); **C08J 5/10** (2013.01 - EP); **C08K 3/32** (2013.01 - KR); **C08K 3/40** (2013.01 - US); **C08K 5/0066** (2013.01 - EP KR); **C08K 5/34922** (2013.01 - EP KR); **C08K 5/34928** (2013.01 - EP); **C08K 5/5205** (2013.01 - CN US); **C08K 5/524** (2013.01 - US); **C08K 5/5313** (2013.01 - CN EP KR US); **C08K 5/5317** (2013.01 - CN EP KR); **C08K 5/5333** (2013.01 - US); **C08K 7/14** (2013.01 - CN EP KR US); **C08K 13/04** (2013.01 - CN US); **C08L 77/06** (2013.01 - CN EP KR US); **C09K 21/12** (2013.01 - EP); **C08J 2377/06** (2013.01 - EP); **C08J 2477/02** (2013.01 - EP); **C08K 3/013** (2018.01 - EP); **C08K 2003/321** (2013.01 - KR); **C08K 2201/003** (2013.01 - CN); **C08K 2201/004** (2013.01 - CN); **C08K 2201/014** (2013.01 - US); **C08L 77/02** (2013.01 - EP); **C08L 2201/02** (2013.01 - CN US); **C08L 2205/02** (2013.01 - CN); **C08L 2205/025** (2013.01 - US)

C-Set (source: CN EP)

CN

1. **C08K 13/04 + C08L 77/06**
2. **C08K 7/14 + C08L 77/06**
3. **C08K 5/5313 + C08L 77/06**
4. **C08K 5/5317 + C08L 77/06**
5. **C08K 5/5205 + C08L 77/06**
6. **C08L 77/06 + C08L 77/02 + C08K 13/04 + C08K 7/14 + C08K 5/5313 + C08K 5/5317 + C08K 5/5205**

EP

1. **C08L 77/06 + C08L 77/02 + C08K 7/14 + C08K 5/5313 + C08K 5/5317 + C08K 5/34922**
2. **C08K 7/14 + C08L 77/06**
3. **C08K 5/5313 + C08L 77/06**
4. **C08K 5/5317 + C08L 77/06**
5. **C08K 5/34922 + C08L 77/06**
6. **C08K 5/0066 + C08L 77/06**

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

DOCDB simple family (publication)

WO 2019030252 A1 20190214; CN 109385078 A 20190226; CN 109385078 B 20210914; DE 102017214048 A1 20190214; EP 3665220 A1 20200617; JP 2020529507 A 20201008; JP 7252202 B2 20230404; KR 102561359 B1 20230801; KR 20200036020 A 20200406; TW 201917172 A 20190501; TW I788386 B 20230101; US 11692097 B2 20230704; US 2021363349 A1 20211125

DOCDB simple family (application)

EP 2018071445 W 20180808; CN 201810143505 A 20180212; DE 102017214048 A 20170811; EP 18752741 A 20180808; JP 2020506763 A 20180808; KR 20207007104 A 20180808; TW 107124909 A 20180719; US 201816637815 A 20180808