

Title (en)

FLAME RETARDANT MASTER BATCH FOR POLYAMIDE 6 AND FIBERS MADE THEREOF

Title (de)

FLAMMHEMMENDER MASTERBATCH FÜR POLYAMID 6 UND DARAUS HERGESTELLTE FASERN

Title (fr)

MÉLANGE MAÎTRE IGNIFUGE POUR POLYAMIDE 6 ET FIBRES FABRIQUÉES À PARTIR DE CELUI-CI

Publication

EP 3765550 A1 20210120 (EN)

Application

EP 19716785 A 20190315

Priority

- EP 18162392 A 20180316
- EP 2019056616 W 20190315

Abstract (en)

[origin: EP3540000A1] A novel flame-retardant polymer master batch comprises an admixture of 8 to 70 wt.% of a flame retardant consisting of 6-(hydroxymethyl)dibenzo[c,e][1,2]oxaphosphinine 6-oxide with the remainder essentially consisting of a base polymer selected from polyamide 6 and a polyamide-6-compatible polymer. A method of producing such master batch comprises the steps of supplying appropriate amounts of the base polymer in granular form and of the flame retardant in powder form to a compounding extruder followed by melt compounding at a temperature of 200 to 260°C and granulation to form said master batch in granular form. A method of producing a plastic product with flame retardant properties, comprises the steps of either (a) melt processing a master batch according to the invention, or (b) melt processing appropriate amounts of base polymer in granular form and of flame retardant in granular form. A plastic product with flame retardant properties obtainable with such method comprises at least one region formed of said base polymer containing an admixture of 8 to 40 wt.% of said flame retardant.

IPC 8 full level

C08J 3/22 (2006.01); **D01F 6/60** (2006.01); **D01F 8/12** (2006.01)

CPC (source: EP)

C08J 3/226 (2013.01); **D01F 1/07** (2013.01); **D01F 6/60** (2013.01); **D01F 8/12** (2013.01); **C08J 2377/02** (2013.01)

Citation (search report)

See references of WO 2019175421A1

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)

EP 3540000 A1 20190918; EP 3765550 A1 20210120; WO 2019175421 A1 20190919

DOCDB simple family (application)

EP 18162392 A 20180316; EP 19716785 A 20190315; EP 2019056616 W 20190315