

Title (en)

MOLDING MATERIALS COMPRISING HIGHLY CROSSLINKED ORGANIC NANOPARTICLES

Title (de)

FORMMASSEN MIT HOCHVERNETZTEN ORGANISCHEN NANOPARTIKELN

Title (fr)

MATIÈRES MOULABLES CONTENANT DES NANOPARTICULES ORGANIQUES HAUTEMENT RÉTICULÉES

Publication

**EP 2084231 A1 20090805 (DE)**

Application

**EP 07820801 A 20071002**

Priority

- EP 2007060419 W 20071002
- EP 06122060 A 20061011
- EP 07820801 A 20071002

Abstract (en)

[origin: WO2008043683A1] Thermoplastic molding materials comprising A) from 10 to 99.9% by weight of a thermoplastic polymer, B) from 0.01 to 10% by weight of a copolymer obtainable by free-radically initiated aqueous emulsion polymerization of ethylenically unsaturated monomers in the presence of at least one dispersant and of at least one free-radical initiator by the feed process, wherein, for the emulsion polymerization, from 70 to 99.5% by weight of a,b-monoethylenically unsaturated compounds [monomers A], and from 0.5 to 30% by weight of compounds with at least two free-radically copolymerizable ethylenically unsaturated groups [monomers B], and optionally up to 5% by weight of a,b-monoethylenically unsaturated mono- or dicarboxylic acids having from 3 to 6 carbon atoms and/or amides thereof [monomers C] are used, where the monomers A to C add up to 100% by weight (total amount of monomers) and the monomer feeds are effected such that = 60% by weight of the total amount of monomers B is added to the polymerization mixture under polymerization conditions at a time after which = 60% by weight of the total amount of monomers has been metered into the polymerization mixture under polymerization conditions, C) from 0 to 70% by weight of further additives, where the sum of the percentages by weight of components A) to C) adds up to 100%.

IPC 8 full level

**C08L 77/00** (2006.01); **C08L 67/00** (2006.01)

CPC (source: EP KR US)

**C08J 3/24** (2013.01 - KR); **C08K 9/04** (2013.01 - KR); **C08L 67/00** (2013.01 - EP US); **C08L 67/02** (2013.01 - EP US); **C08L 77/00** (2013.01 - EP US); **C08L 101/00** (2013.01 - KR); **B82Y 30/00** (2013.01 - KR); **C08L 25/04** (2013.01 - EP US)

Citation (search report)

See references of WO 2008043683A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

**WO 2008043683 A1 20080417**; BR PI0719658 A2 20140429; CN 101522807 A 20090902; EP 2084231 A1 20090805; JP 2010506020 A 20100225; KR 20090088367 A 20090819; US 2010036041 A1 20100211

DOCDB simple family (application)

**EP 2007060419 W 20071002**; BR PI0719658 A 20071002; CN 200780038219 A 20071002; EP 07820801 A 20071002; JP 2009531808 A 20071002; KR 20097009475 A 20071002; US 44513807 A 20071002