

Title (en)

PROCESS FOR THE PRODUCTION OF HYPERBRANCHED, DENDRITIC POLYURETHANES BY MEANS OF REACTIVE EXTRUSION

Title (de)

VERFAHREN ZUR HERSTELLUNG HYPERVERZWEIGTER, DENDRITISCHER POLYURETHANE MITTELS REAKTIVER EXTRUSION

Title (fr)

PROCÉDÉ DE PRODUCTION DE POLYURÉTHANES DENDRITIQUES, HYPERRAMIFIÉS, PAR EXTRUSION RÉACTIVE

Publication

EP 2185618 A1 20100519 (DE)

Application

EP 08787156 A 20080813

Priority

- EP 2008060605 W 20080813
- DE 102007049328 A 20071012

Abstract (en)

[origin: CN101407570A] The invention relates to a process of preparing hyperbranched dendritic polyurethanes by means of reactive extrusion, comprising: A) at least one aromatic group, aliphatic group, (ring) aliphatic group and/or polyisocyanate of ring aliphatic group having at least two NCO groups, and B) at least one monomer, oligomerization and/or polymeric polyhydric alcohol having at least two HO groups; C) under the presence of carbamide alkylation catalyst based on total material density of 0.01 to 3 weight percent, wherein other auxiliary agent or additive are included, in an extruder, a flowing pipe, a strength kneader, a strength mixer or a static mixer, solvent-free reaction is performed through a short time reaction under the condition of heat supply with strength mixing temperature larger than 25 DEG C, and final products are separated subsequently, particularly separation is performed through fast cooling.

IPC 8 full level

C08G 18/32 (2006.01); **B29C 48/395** (2019.01); **C08G 83/00** (2006.01); **B29C 48/40** (2019.01); **B29C 48/44** (2019.01)

CPC (source: EP US)

C08G 18/0895 (2013.01 - EP US); **C08G 18/3206** (2013.01 - EP US); **C08G 18/755** (2013.01 - EP US); **C08G 83/005** (2013.01 - EP US); **B29C 48/03** (2019.01 - EP US); **B29C 48/362** (2019.01 - EP US); **B29C 48/40** (2019.01 - EP US); **B29C 48/435** (2019.01 - EP US); **B29C 48/44** (2019.01 - EP US)

Citation (search report)

See references of WO 2009049941A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

DE 102007049328 A1 20090416; CN 101407570 A 20090415; EP 2185618 A1 20100519; US 2011065886 A1 20110317; WO 2009049941 A1 20090423

DOCDB simple family (application)

DE 102007049328 A 20071012; CN 200810169288 A 20081010; EP 08787156 A 20080813; EP 2008060605 W 20080813; US 68202208 A 20080813