

Title (en)

POLYURETHANE POLYMER BASED ON AN AMPHIPHILIC BLOCK COPOLYMER AND ITS USE AS IMPACT MODIFIER

Title (de)

AUF AMPHIPHILEM BLOCK-COPOLYMER BASIERENDES POLYURETHAN-POLYMER UND DESSEN VERWENDUNG ALS SCHLAGZÄHIGKEITSMODIFIKATOR

Title (fr)

POLYMÈRE DE TYPE POLYURÉTHANE À BASE D UN COPOLYMÈRE SÉQUENCÉ AMPHIPHILE ET SON UTILISATION EN TANT QUE MODIFICATEUR DE RÉSISTANCE AUX CHOCS

Publication

**EP 2268694 A1 20110105 (DE)**

Application

**EP 09733485 A 20090416**

Priority

- EP 2009054546 W 20090416
- EP 08154634 A 20080416
- EP 09733485 A 20090416

Abstract (en)

[origin: EP2110397A1] Impact modifier comprises an isocyanate group containing polyurethane-polymer (PU1), which is obtained from at least one polyisocyanate, at least one amphiphilic block copolymer having at least one hydroxyl group, and optionally at least one compound with at least two isocyanate reactive groups; or a conversion product (PU2) of PU1 with at least an isocyanate reactive compound. Independent claims are included for: (1) a unicomponent heat-curing epoxide resin composition comprising at least an epoxide resin having an average of greater than one epoxide group/molecule, at least one curing agent for epoxide resin, which is activated at high temperature and the impact modifier; and (2) a process for adhering heat stable substrates comprising applying an unicomponent heat-curing epoxide resin composition on the surface of a heat stable substrate (S1), preferably a metal, contacting the applied epoxide resin composition with the surface of a further heat stable substrate (S2), preferably a metal, heating the epoxide resin composition at 100-130, preferably 115-125[deg] C, contacting the substrates (S1) and (S2), and the heat-curing epoxide resin composition with a wash liquid at 20-100[deg] C, preferably 50-70[deg] C, heating the composition at 140-220[deg] C, preferably 140-200[deg] C, the substrate at 160-190[deg] C; where the materials for the substrates (S1) and (S2) are same or different.

IPC 8 full level

**C08G 18/48** (2006.01); **C08G 18/10** (2006.01); **C08G 18/12** (2006.01); **C08G 18/75** (2006.01); **C08G 18/80** (2006.01); **C08G 59/40** (2006.01); **C09J 163/02** (2006.01)

CPC (source: EP US)

**C08G 18/10** (2013.01 - EP US); **C08G 18/2865** (2013.01 - EP US); **C08G 18/4018** (2013.01 - EP US); **C08G 18/4866** (2013.01 - EP US); **C08G 18/6715** (2013.01 - EP US); **C08G 18/755** (2013.01 - EP US); **C08G 18/808** (2013.01 - EP US); **C08G 59/4021** (2013.01 - EP US); **C08L 63/00** (2013.01 - EP US); **C09J 163/00** (2013.01 - EP US); **C08K 3/013** (2017.12 - EP US); **C08K 5/0016** (2013.01 - EP US); **C08L 75/04** (2013.01 - EP US); **C08L 75/08** (2013.01 - EP US); **C08L 2205/03** (2013.01 - EP US); **C08L 2666/20** (2013.01 - EP US)

Citation (search report)

See references of WO 2009127699A1

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Designated extension state (EPC)

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**EP 08154634 A 20080416**; CN 200980113349 A 20090416; EP 09733485 A 20090416; EP 2009054546 W 20090416; JP 2011504470 A 20090416; US 93708709 A 20090416