Title (en)

HYPERBRANCHED POLYMERS AND OLIGOMERS COMPRISING TERMINAL AMINO GROUPS AS CURING AGENTS FOR EPOXY RESINS

Title (de)

HOCHVERZWEIGTE POLYMERE UND OLIGOMERE MIT TERMINALEN AMINOGRUPPEN ALS HÄRTER FÜR EPOXIDHARZE

Title (fr)

POLYMÈRES ET OLIGOMÈRES HYPERRAMIFIÉS À GROUPES AMINO TERMINAUX EN TANT QUE DURCISSEURS POUR RÉSINES ÉPOXY

Publication

EP 2285861 A2 20110223 (DE)

Application

EP 09730871 A 20090409

Priority

- EP 2009054299 W 20090409
- EP 08154436 A 20080411
- EP 09730871 A 20090409

Abstract (en)

[origin: WO2009124998A2] The invention relates to the use of hyperbranched polymers or oligomers comprising terminal primary and/or secondary amino groups as curing agents for epoxy resins. The invention further relates to a composition containing such polymers or oligomers, an uncured or only partially cured epoxy resin, and at least one optional curing agent for epoxy resins, as well as a cured epoxy resin that can be obtained by curing said components. The invention finally relates to a method for curing epoxy resins. In said method, an uncured or only partially cured epoxy resin is brought to a temperature of 5 to 150°C or is exposed to microwave radiation along with at least one polymer or oligomer according to the definition above and at least one optional conventional curing agent for epoxy resins.

IPC 8 full level

C08G 59/18 (2006.01); **C08G 59/50** (2006.01); **C08G 71/02** (2006.01); **C08G 83/00** (2006.01); **C08L 63/00** (2006.01)

CPC (source: EP US)

C08G 59/18 (2013.01 - EP US); **C08G 59/4021** (2013.01 - EP US); **C08G 59/50** (2013.01 - EP US); **C08G 83/005** (2013.01 - EP US); **C08L 63/00** (2013.01 - EP US); C08L 79/02 (2013.01 - EP US)

Citation (search report)

See references of WO 2009124998A2

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 MK MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

WO 2009124998 A2 20091015; **WO 2009124998 A3 20110303**; CN 102066451 A 20110518; CN 102066451 B 20140806; EP 2285861 A2 20110223; JP 2011517716 A 20110616; US 2011028603 A1 20110203

DOCDB simple family (application)

EP 2009054299 W 20090409; CN 200980121329 A 20090409; EP 09730871 A 20090409; JP 2011503451 A 20090409; US 93648209 A 20090409