

Title (en)

Process for the continuous production of epoxy-(meth)acrylicstyrene polymers and their use in coating

Title (de)

Verfahren zur kontinuierlichen Herstellung von Epoxy-(Meth)Acryl-Styrolpolymeren und ihre Verwendung in Beschichtungsmassen

Title (fr)

Procédé de production en continu de polymères styrène-epoxy-(méth)acrylique et leur utilisation dans des revêtements

Publication

**EP 1544217 A8 20051019 (EN)**

Application

**EP 05075282 A 20000712**

Priority

- EP 00950316 A 20000712
- US 21933499 P 19990714

Abstract (en)

[origin: WO0105843A1] A process is disclosed for a continuous, high temperature polymerization process for preparing a free radically polymerized epoxy-functional polymeric product. The process comprises continuously charging into a reactor at least one epoxy-functional acrylic monomer, and optionally at least one non-functional free radical polymerizable monomer. An optional free radical polymerization initiator may also be added. The reactor is maintained at an effective temperature for an effective period of time to cause polymerization of the monomers into a polymeric product, such that the polymeric product is formed substantially free of gel particles. A clear coating is also disclosed incorporating polymers of the present invention, such that the clear coating has a low Delta b value at standard conditions.

IPC 1-7

**C08F 2/02**; **C08F 2/06**; **C08F 220/32**; **C08F 212/08**; **C09D 163/00**

IPC 8 full level

**C08F 2/00** (2006.01); **C08F 2/02** (2006.01); **C08F 2/06** (2006.01); **C08F 4/28** (2006.01); **C08F 12/08** (2006.01); **C08F 20/10** (2006.01); **C08F 20/32** (2006.01); **C08F 212/08** (2006.01); **C08F 212/12** (2006.01); **C08F 220/12** (2006.01); **C08F 220/32** (2006.01); **C08G 59/00** (2006.01); **C09D 5/03** (2006.01); **C09D 125/08** (2006.01); **C09D 133/04** (2006.01); **C09D 163/00** (2006.01)

CPC (source: EP US)

**C08F 2/02** (2013.01 - EP US); **C08F 2/06** (2013.01 - EP US); **C08F 212/12** (2013.01 - EP US); **C08F 220/12** (2013.01 - EP US); **C08F 220/325** (2020.02 - EP US); **C08G 59/00** (2013.01 - EP US); **C09D 163/00** (2013.01 - EP US); **Y10T 428/29** (2015.01 - EP US)

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

**WO 0105843 A1 20010125**; AT E315052 T1 20060215; AT E455797 T1 20100215; AU 6343700 A 20010205; CA 2378013 A1 20010125; CA 2378013 C 20071009; CN 1221571 C 20051005; CN 1360598 A 20020724; DE 60025361 D1 20060330; DE 60025361 T2 20060727; DE 60043753 D1 20100311; DK 1198481 T3 20060522; EP 1198481 A1 20020424; EP 1198481 B1 20060104; EP 1544217 A2 20050622; EP 1544217 A3 20050831; EP 1544217 A8 20051019; EP 1544217 B1 20100120; ES 2254204 T3 20060616; ES 2340174 T3 20100531; US 6552144 B1 20030422

DOCDB simple family (application)

**US 0018890 W 20000712**; AT 00950316 T 20000712; AT 05075282 T 20000712; AU 6343700 A 20000712; CA 2378013 A 20000712; CN 00810235 A 20000712; DE 60025361 T 20000712; DE 60043753 T 20000712; DK 00950316 T 20000712; EP 00950316 A 20000712; EP 05075282 A 20000712; ES 00950316 T 20000712; ES 05075282 T 20000712; US 61440200 A 20000712