

Title (en)

METHOD FOR MANUFACTURING POLYMER-GRADE BIO-BASED ACRYLIC ACID FROM GLYCEROL

Title (de)

VERFAHREN ZUR HERSTELLUNG VON ACRYLSÄULE DER POLYMERKLASSE AUF BIOLOGISCHER BASIS AUS GLYCERIN

Title (fr)

PROCEDE DE FABRICATION D'ACIDE ACRYLIQUE BIO-RESSOURCE DE GRADE POLYMERÉ A PARTIR DE GLYCEROL

Publication

EP 2547643 A1 20130123 (FR)

Application

EP 11713325 A 20110315

Priority

- FR 1051961 A 20100318
- FR 2011050512 W 20110315

Abstract (en)

[origin: WO2011114051A1] The present invention relates to the manufacture of a "polymer-grade" bio-based acrylic acid, said "polymer grade" being defined by a minimum 14C content and by the content-limiting thresholds for impurities detrimental to the polymerization methods, in particular total aldehydes, protoanemonin, maleic anhydride, and non-phenolic polymerization inhibitors. One aim of the invention is a method for manufacturing said acid from glycerol as a raw material, said method including a step of extracting the acrylic acid by means of a heavy hydrophobic solvent. The invention also relates to the use of said acid for manufacturing superabsorbent materials or for manufacturing polymers or copolymers by polymerizing derivatives of said acid in the form of ester or amide.

IPC 8 full level

C07C 45/52 (2006.01); **C07C 51/25** (2006.01); **C07C 51/44** (2006.01); **C07C 51/487** (2006.01); **C08F 220/06** (2006.01)

CPC (source: EP US)

C07C 45/52 (2013.01 - EP US); **C07C 51/252** (2013.01 - EP US); **C07C 51/44** (2013.01 - EP US); **C07C 51/487** (2013.01 - EP US);
C08F 20/06 (2013.01 - EP US); **C08F 20/10** (2013.01 - EP US); **C08F 20/56** (2013.01 - EP US); **C08F 220/06** (2013.01 - EP US)

C-Set (source: EP US)

1. **C07C 45/52 + C07C 47/22**
2. **C07C 51/252 + C07C 57/04**
3. **C07C 51/44 + C07C 57/04**
4. **C07C 51/487 + C07C 57/04**

Citation (search report)

See references of WO 2011114051A1

Designated contracting state (EPC)

AL 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 RS SE SI SK SM TR

DOCDB simple family (publication)

WO 2011114051 A1 20110922; EP 2547643 A1 20130123; FR 2957594 A1 20110923; FR 2957594 B1 20130426; JP 2013522280 A 20130613;
US 2013165690 A1 20130627

DOCDB simple family (application)

FR 2011050512 W 20110315; EP 11713325 A 20110315; FR 1051961 A 20100318; JP 2012557589 A 20110315; US 201113635017 A 20110315