

Title (en)

ISOLATION OF BISPHENOL A FROM DEPOLYMERIZATION OF A POLY(CARBONATE)

Title (de)

ISOLIERUNG VON BISPHENOL A AUS DER DEPOLYMERISATION EINES POLY(CARBONATS)

Title (fr)

ISOLEMENT DE BISPHÉNOL A À PARTIR DE LA DÉPOLYMÉRISATION D'UN POLY(CARBONATE)

Publication

EP 3986851 A1 20220427 (EN)

Application

EP 20736541 A 20200617

Priority

- US 201962863354 P 20190619
- US 2020038063 W 20200617

Abstract (en)

[origin: WO2020257234A1] A process for isolation of bisphenol A from depolymerization of a poly(carbonate) includes depolymerizing a poly(carbonate) having repeating units derived from bisphenol A in the presence of a base, a Ci-6 alcohol, and an organic cosolvent that is miscible with the Ci-6 alcohol and has a boiling point that is greater than 90°C, to provide a depolymerized reaction mixture including bisphenol A, a di(Ci-6 alkyl) carbonate, the Ci-6 alcohol, the organic cosolvent, and optionally, residual base; separating the di(Ci-6 alkyl) carbonate, the Ci-6 alcohol, and optionally, at least a portion of the organic co solvent from the depolymerized reaction mixture, to provide a di(Ci-6 alkyl) carbonate mixture; combining the di(Ci-6 alkyl) carbonate mixture with an aqueous base under conditions effective to hydrolyze the di(Ci-6 alkyl) carbonate to a corresponding Ci-6 alcohol; and crystallizing bisphenol A from the residual depolymerized reaction mixture to provide a purified bisphenol A. The bisphenol A isolated by the method described herein can have improved purity and can be particularly useful for providing thermoplastic polymers.

IPC 8 full level

C07C 39/16 (2006.01); **C07C 37/52** (2006.01); **C08J 11/16** (2006.01)

CPC (source: CN EP)

C07C 37/0555 (2013.01 - CN EP); **C07C 37/74** (2013.01 - CN EP); **C07C 37/84** (2013.01 - CN EP); **C07C 39/16** (2013.01 - CN); **C08G 64/00** (2013.01 - CN); **C08G 73/1046** (2013.01 - CN); **C08G 75/20** (2013.01 - CN); **C08J 11/24** (2013.01 - EP); **C08J 2369/00** (2013.01 - EP); **Y02W 30/62** (2015.05 - EP)

Citation (search report)

See references of WO 2020257234A1

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

WO 2020257234 A1 20201224; CN 114008010 A 20220201; EP 3986851 A1 20220427

DOCDB simple family (application)

US 2020038063 W 20200617; CN 202080044273 A 20200617; EP 20736541 A 20200617