Title (en)

SELECTIVE DEPOLYMERISATION OF POLYAMIDE 6 TO PRODUCE CAPROLACTAM FROM MIXTURES OF CAPROLACTAM-CONTAINING POLYMERS AND POLYURETHANE-CONTAINING POLYMERS, IN PARTICULAR POLYURETHANE BLOCK COPOLYMERS

Title (de)

SELEKTIVE DEPOLYMERISATION VON POLYAMID 6 ZU CAPROLACTAM AUS GEMISCHEN VON CAPROLACTAMHALTIGEN POLYMEREN UND POLYURETHANHALTIGEN POLYMEREN, INSBESONDERE POLYURETHANBLOCKCOPOLYMEREN

Title (fr)

DÉPOLYMÉRISATION SÉLECTIVE DE POLYAMIDE 6 EN CAPROLACTAME À PARTIR DE MÉLANGES DE POLYMÈRES CONTENANT DU CAPROLACTAME ET DE POLYMÈRES CONTENANT DU POLYURÉTHANE, EN PARTICULIER DE COPOLYMÈRES SÉQUENCÉS DE POLYURÉTHANE

Publication

EP 4263687 A1 20231025 (DE)

Application

EP 21836523 A 20211214

Priority

- EP 20215074 A 20201217
- EP 2021085651 W 20211214

Abstract (en)

[origin: WO2022129022A1] Method for obtaining caprolactam from mixtures of caprolactam-containing polymers and polyurethane-containing polymers, in particular polyurethane block copolymers, by depolymerisation, characterised in that the depolymerisation of the mixture is carried out in the presence of 0.05 to 5 wt.% of a base, at a temperature of 250 to 350°C, at a pressure of 5 to 700 mbar, with the caprolactam being obtained in gas form.

IPC 8 full level

C08J 11/16 (2006.01); **C08L 75/04** (2006.01); **C08L 77/02** (2006.01)

CPC (source: EP IL KR US)

C07D 223/10 (2013.01 - KR US); **C08J 11/16** (2013.01 - EP IL KR US); C08J 2375/04 (2013.01 - KR US); C08J 2377/02 (2013.01 - EP IL KR US); C08J 2475/04 (2013.01 - EP IL); Y02W 30/62 (2015.05 - EP IL KR US)

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

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

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DOCDB simple family (application)

EP 2021085651 W 20211214; CN 202180065909 A 20211214; EP 21836523 A 20211214; IL 30364423 A 20230612; JP 2023537192 A 20211214; KR 20237020238 A 20211214; US 202118265702 A 20211214