

Title (en)
PROCESS FOR THE PREPARATION OF POLYAMINES OF THE DIPHENYL METHANE SERIES

Publication
EP 0000778 B1 19800723 (DE)

Application
EP 78100591 A 19780804

Priority
DE 2736862 A 19770816

Abstract (en)
[origin: EP0000778A1] 1. A process for the production of polyamines of the diphenyl methane series having a high content of 4,4'-isomers and a low content of 2,2'- and 2,4'-isomers by reacting primary or secondary aromatic amines with formaldehyde in the presence of ion exchangers as solid catalysts, which ion exchangers contain sulphonic acid groups, are based on styrene-divinyl benzene copolymers and are present in heterogeneous phase, optionally by way of the intermediate stage of N-substituted precondensates produced in the absence of acid catalysts, characterised in that a) the catalysts used are water-saturated gel-form ion exchangers containing sulphonic acid groups based on styrene-divinyl benzene copolymers, which are cross-linked with 2%, by weight, based on copolymer, of divinyl benzene, or water-saturated macroporous ion exchangers containing sulphonic acid groups based on styrene-divinyl benzene copolymers which are cross-linked with 18%, by weight, based on copolymer, of divinyl benzene ; and b) the catalytic reaction is carried out within a temperature range from 50-150 degrees C optionally under pressure and without any significant distillation of the condensation water and the water introduced into the system.

IPC 1-7
C07C 87/50; **C07C 85/24**

IPC 8 full level
C07C 211/50 (2006.01); **C07C 67/00** (2006.01); **C07C 209/00** (2006.01); **C07C 209/78** (2006.01)

IPC 8 main group level
C07C (2006.01)

CPC (source: EP)
C07C 209/78 (2013.01)

C-Set (source: EP)
C07C 209/78 + **C07C 211/50**

Cited by
EP0043933A1; EP0078414A1; US8536370B2; WO2009144148A1

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DOCDB simple family (publication)
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