

Title (en)

METHODS OF PREPARATION OF METAL EXCHANGED ZEOLITES

Title (de)

VERFAHREN ZUR HERSTELLUNG VON METALLAUSGETAUSCHTEN ZEOLITHEN

Title (fr)

PROCÉDÉ DE PRÉPARATION DE ZÉOLITES ÉCHANGÉES PAR UN MÉTAL

Publication

EP 3962644 A2 20220309 (EN)

Application

EP 20799297 A 20200427

Priority

- IN 201921016803 A 20190427
- IB 2020053927 W 20200427

Abstract (en)

[origin: WO2020222105A2] Methods of preparation of metal exchanged zeolites by ion exchange of metals such as copper, iron or manganese with aluminosilicates and silicoaluminophosphates such as CHA, MFI, BEA and small pore zeolite frameworks are disclosed. The method uses a combination of a liquid reaction medium with a gaseous reaction medium wherein the metal to be exchanged is preferably in the elemental metallic form and the gaseous reaction medium comprises at least carbon dioxide. These metal exchanged zeolites are useful as catalysts for the reduction of oxides of nitrogen from gaseous streams by Selective Catalytic Reduction with ammonia or urea.

IPC 8 full level

B01J 29/06 (2006.01); **B01D 53/56** (2006.01); **B01J 29/80** (2006.01); **B01J 29/85** (2006.01); **B01J 37/04** (2006.01); **B01J 37/06** (2006.01);
B01J 37/08 (2006.01); **B01J 37/10** (2006.01); **B01J 37/30** (2006.01)

CPC (source: EP)

B01J 29/7215 (2013.01); **B01J 29/723** (2013.01); **C01B 39/026** (2013.01)

Citation (search report)

See references of WO 2020222105A2

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 2020222105 A2 20201105; WO 2020222105 A3 20201210; WO 2020222105 A8 20210610; CN 114025877 A 20220208;
EP 3962644 A2 20220309

DOCDB simple family (application)

IB 2020053927 W 20200427; CN 202080046212 A 20200427; EP 20799297 A 20200427