Title (en)

ZEOLITE ZSM-11, A METHOD FOR PREPARING IT, AND A PROCESS OF CATALYTIC CONVERSION USING A CATALYST COMPRISING IT

Publication

EP 0000669 B1 19800903 (EN)

Application

EP 78300219 A 19780801

Priority

US 82099277 A 19770801

Abstract (en)

[origin: US4108881A] {PG,1 As synthesized by conventional technique, zeolite ZSM-11 is crystallized in the presence of substantial amount of at least one of the quaternary cations of a Group VA element of the Periodic Table of Elements. When synthesized in the conventional way, ZSM-11 contains said cations as well as substantial amount of sodium ions. To obtain a more catalytically active form of ZSM-11, the sodium ions must be exchanged to very low levels. By synthesizing zeolite ZSM-11 according to the present method, i.e. in the presence of one or more alkylenediamines having from 7 to 12 carbon atoms and with a specifically defined reaction mixture composition, ZSM-11 having different organic cations but the same crystal structure as conventionally prepared ZSM-11 is obtained. The ZSM-11 prepared in accordance hereto is very low in sodium content as synthesized.

IPC 1-7

C01B 33/28; B01J 29/04

IPC 8 full level

B01J 29/00 (2006.01); **B01J 29/40** (2006.01); **C10G 11/04** (2006.01); **C01B 33/40** (2006.01); **C01B 39/00** (2006.01); **C01B 39/04** (2006.01); **C01B 39/36** (2006.01); **C01B 39/40** (2006.01); **C01B 39/42** (2006.01); **C07B 61/00** (2006.01); **C07C 1/00** (2006.01); **C07C 2/12** (2006.01); **C07C 2/66** (2006.01); **C07C 2/86** (2006.01); **C07C 5/22** (2006.01); **C07C 5/27** (2006.01); **C07C 5/41** (2006.01); **C07C 6/12** (2006.01); **C07C 15/02** (2006.01); **C07C 67/00** (2006.01); **C10G 11/00** (2006.01); **C10G 11/05** (2006.01)

CPC (source: EP US)

B01J 29/40 (2013.01 - EP US); **C01B 39/365** (2013.01 - EP US); **C07C 2/12** (2013.01 - EP US); **C07C 2/66** (2013.01 - EP US); **C07C 2/864** (2013.01 - EP US); **C07C 5/222** (2013.01 - EP US); **C07C 5/2708** (2013.01 - EP US); **C07C 5/41** (2013.01 - EP US); **C07C 6/123** (2013.01 - EP US); **C07C 6/126** (2013.01 - EP US); C07C 2529/06 (2013.01 - EP US); Y10S 423/29 (2013.01 - EP US)

C-Set (source: EP US)

1. **C07C 2/864** + **C07C 15/00**
2. **C07C 5/2708** + **C07C 9/00**

Cited by

EP0068796A1; EP0007081A1; EP0014059A1; CN106944080A; US4797267A; AU690402B2; CN1041399C; EP0046504A1; EP0042226A1; US4537754A; US4741891A; US4836996A; US4876412A; US5098685A; WO9620891A1

Designated contracting state (EPC)

BE DE FR GB NL

DOCDB simple family (publication)

US 4108881 A 19780822; AU 3848978 A 19800207; AU 515825 B2 19810430; CA 1119146 A 19820302; DE 2860140 D1 19801211; EP 0000669 A1 19790207; EP 0000669 B1 19800903; IT 1097569 B 19850831; IT 7826376 A0 19780801; JP S5452699 A 19790425; JP S6215488 B2 19870408; NZ 188025 A 19801128; ZA 784360 B 19800326

DOCDB simple family (application)

US 82099277 A 19770801; AU 3848978 A 19780731; CA 308325 A 19780728; DE 2860140 T 19780801; EP 78300219 A 19780801; IT 2637678 A 19780801; JP 9321778 A 19780801; NZ 18802578 A 19780801; ZA 784360 A 19780801