

Title (en)  
SYNTHESIS OF ALUMINOPHOSPHATES AND SILICOALUMINOPHOSPHATES

Title (de)  
SYNTHESE VON ALUMOPHOSPHATEN UND SILICOALUMOPHOSPHATEN

Title (fr)  
SYNTHESE D'ALUMINOPHOSPHATES ET DE SILICOALUMINOPHOSPHATES

Publication  
**EP 1511688 A1 20050309 (EN)**

Application  
**EP 03734535 A 20030611**

Priority  

- US 0318358 W 20030611
- US 17029302 A 20020612
- US 17125702 A 20020612
- US 17118602 A 20020612
- US 42292303 A 20030424

Abstract (en)  
[origin: WO03106341A1] The invention is directed to a method of synthesising silicoaluminophosphate and aluminophosphate molecular sieves using synthesis templates that contain at least one template of general formula (I)  $R_{<1>}R_{<2>}N-R_{<3>}$  (I) wherein -  $R_{<1>}$  and  $R_{<2>}$  are independently selected from the group consisting of alkyl groups having from 1 to 3 carbon atoms and hydroxyalkyl groups having from 1 to 3 carbon atoms; -  $R_{<3>}$  is selected from the group consisting of 4- to 8-membered cycloalkyl groups, optionally substituted by 1 to 3 alkyl groups having from 1 to 3 carbon atoms, 4 to 8-membered heterocyclic groups having from 1 to 3 heteroatoms, said heterocyclic groups being optionally substituted by 1 to 3 alkyl groups having from 1 to 3 carbon atoms and the heteroatoms in said heterocyclic groups being selected from the group consisting of O, N, and S. In particular, the present invention relates to the synthesis of silicoaluminophosphate molecular sieves of the CHA framework type having a low silicon to aluminium atomic ratio.

IPC 1-7  
**C01B 37/04**; **C01B 37/08**; **B01J 29/83**; **B01J 29/85**; **C10G 3/00**

IPC 8 full level  
**B01J 29/83** (2006.01); **B01J 29/84** (2006.01); **B01J 29/85** (2006.01); **C01B 37/04** (2006.01); **C01B 37/08** (2006.01); **C01B 39/54** (2006.01); **C07C 1/20** (2006.01); **C10G 3/00** (2006.01); **B01J 27/12** (2006.01); **B01J 35/00** (2024.01)

CPC (source: EP)  
**B01J 29/83** (2013.01); **B01J 29/84** (2013.01); **B01J 29/85** (2013.01); **C01B 37/04** (2013.01); **C01B 37/08** (2013.01); **C01B 39/54** (2013.01); **C07C 1/20** (2013.01); **C10G 3/00** (2013.01); **C10G 3/49** (2013.01); **C10G 3/62** (2013.01); **B01J 27/12** (2013.01); **B01J 35/40** (2024.01); **B01J 2229/42** (2013.01); **C07C 2529/85** (2013.01); **C10G 2400/20** (2013.01); **Y02P 30/20** (2015.11)

C-Set (source: EP)  
**C07C 1/20** + **C07C 11/02**

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)  
**WO 03106341 A1 20031224**; AU 2003239236 A1 20031231; CN 1302989 C 20070307; CN 1659102 A 20050824; EP 1511688 A1 20050309

DOCDB simple family (application)  
**US 0318358 W 20030611**; AU 2003239236 A 20030611; CN 03813495 A 20030611; EP 03734535 A 20030611