

Title (en)

CATALYTIC CONVERSION OF GASES VIA CATION-EXCHANGEABLE ALUMINO-SILICATE MATERIALS

Title (de)

KATALYTISCHE UMWANDLUNG VON GASEN MIT HILFE VON ALUMINO-SILICATEN MIT KATIONENAUSTAUSCHKAPAZITÄT

Title (fr)

CONVERSION CATALYTIQUE DE GAZ A L'AIDE DE MATIERES ALUMINO-SILICATES ECHANGEUSES DE CATIONS

Publication

EP 1011842 A4 20011031 (EN)

Application

EP 98933360 A 19980715

Priority

- AU 9800558 W 19980715
- AU PO787797 A 19970715

Abstract (en)

[origin: WO9903566A1] A process for catalytic conversion and/or adsorption of gases inclusive of NO_x, SO_x, CO₂, CO, dioxins and PAHs and combinations thereof wherein said gases may contain particulates which include contacting one or more of such gases with an alumino-silicate material having: (i) a primarily tetrahedrally co-ordinated aluminium as established by the fact that the ²⁷Al Magic Angle Spinning (MAS) provides a single peak at 55-58 ppm (FWHM = SIMILAR 23 ppm) relative to Al(H₂O)₆³⁺; and (ii) a cation exchange capacity of at least 1 meq 100 g⁻¹ in aqueous solution at room temperature.

IPC 1-7

B01D 53/00; **B01J 29/00**; **B01D 53/88**; **B01D 53/04**; **B01J 29/06**; **C01B 33/46**; **B01J 21/16**

IPC 8 full level

B01J 29/46 (2006.01); **B01D 53/04** (2006.01); **B01D 53/86** (2006.01); **B01D 53/88** (2006.01); **B01D 53/94** (2006.01); **B01J 29/06** (2006.01); **B01J 29/74** (2006.01)

CPC (source: EP)

B01D 53/02 (2013.01); **B01D 53/04** (2013.01); **B01D 53/88** (2013.01); **B01J 29/061** (2013.01); **B01D 2253/106** (2013.01); **B01D 2253/1085** (2013.01); **B01D 2257/302** (2013.01); **B01D 2257/404** (2013.01); **B01D 2257/50** (2013.01); **Y02C 20/40** (2020.08)

Citation (search report)

- [DY] WO 9500441 A1 19950105 - UNIV QUEENSLAND [AU], et al
- [Y] WO 9616723 A1 19960606 - SIEMENS AG [DE], et al
- See references of WO 9903566A1

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

WO 9903566 A1 19990128; AU PO787797 A0 19970807; CA 2294394 A1 19990128; CN 1270540 A 20001018; EP 1011842 A1 20000628; EP 1011842 A4 20011031; JP 2002508705 A 20020319; NZ 501430 A 20010629

DOCDB simple family (application)

AU 9800558 W 19980715; AU PO787797 A 19970715; CA 2294394 A 19980715; CN 98807277 A 19980715; EP 98933360 A 19980715; JP 50597299 A 19980715; NZ 50143098 A 19980715