

Title (en)

MECHANICALLY STABLE CATALYST BASED ON ALPHA-ALUMINA

Title (de)

MECHANISCH STABILER KATALYSATOR AUF BASIS VON ALPHA-ALUMINIUMOXID

Title (fr)

CATALYSEUR MECANIQUEMENT STABLE A BASE D'ALUMINE ALPHA

Publication

**EP 1919611 A1 20080514 (DE)**

Application

**EP 06792946 A 20060822**

Priority

- EP 2006065559 W 20060822
- DE 102005040286 A 20050825

Abstract (en)

[origin: WO2007023162A1] Disclosed is a catalyst for gas phase reactions, which is provided with great mechanical stability and comprises one or several active metals on a carrier containing alumina as a carrier material. Said catalyst is characterized in that the alumina moiety of the carrier is composed substantially of alpha-alumina. Ruthenium, copper, and/or gold is/are the preferred active metal/s used. Particularly preferred inventive catalysts contain a) 0.001 to 10 percent by weight of ruthenium, copper, and/or gold, b) 0 to 5 percent by weight of one or several alkaline earth metals, c) 0 to 5 percent by weight of one or several alkali metals, d) 0 to 10 percent by weight of one or several rare earth metals, e) 0 to 10 percent by weight of one or several other metals selected among the group comprising palladium, platinum, osmium, iridium, silver, and rhenium, the percentages being in relation to the total weight of the catalyst, on the carrier made of alpha Al<SUB>2</SUB>O<SUB>3</SUB>. The disclosed catalysts are preferably used for the oxidation of hydrogen chloride (Deacon reaction).

IPC 8 full level

**B01J 21/04** (2006.01); **B01J 23/46** (2006.01); **C01B 7/04** (2006.01)

CPC (source: EP KR US)

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Citation (search report)

See references of WO 2007023162A1

Citation (examination)

- WO 02100537 A2 20021219 - BASF AG [DE], et al
- EP 0417629 A1 19910320 - GOODRICH CO B F [US]

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