

Title (en)

METAL-OXIDE SUPPORTED AU CATALYSTS, METHOD FOR THEIR PRODUCTION AND USE THEREOF

Title (de)

METALLOXIDGETRÄGERTE AU-KATALYSATOREN, VERFAHREN ZU DEREN HERSTELLUNG SOWIE DEREN VERWENDUNG

Title (fr)

CATALYSEURS D'OR SUR SUPPORT D'OXYDE METALLIQUE, LEUR PROCEDE DE PRODUCTION ET LEUR UTILISATION

Publication

EP 1478459 A1 20041124 (DE)

Application

EP 03708030 A 20030213

Priority

- DE 0300439 W 20030213
- DE 10205873 A 20020213

Abstract (en)

[origin: WO03068389A1] The invention relates to metal-oxide supported Au catalysts with a narrow cluster size distribution and a high degree of dispersion for the Au cluster. Said catalysts are obtained by drying moist Au/metal-oxide catalyst precursors, obtained in a known manner, by means of co-precipitation, precipitation or impregnation and by reducing the dried precursors in the gaseous phase using H₂ or CO at temperatures of </ = 250 DEG C. The inventive catalysts are suitable for the selective CO oxidation in reformer gases (PROX), the low-temperature water-gas shift reaction (WGS), the synthesis of methanol, the epoxidation of olefins, or the total oxidation of CO, hydrocarbons or halogenated gases (VOC).

IPC 1-7

B01J 23/52; B01J 37/02; B01J 37/03

IPC 8 full level

B01J 23/52 (2006.01); **B01J 23/66** (2006.01); **B01J 23/89** (2006.01); **B01J 35/10** (2006.01); **B01J 37/02** (2006.01); **B01J 37/03** (2006.01); **C01B 3/16** (2006.01); **C01B 3/58** (2006.01); **C07C 29/151** (2006.01); **H01M 8/06** (2006.01)

CPC (source: EP)

B01J 23/52 (2013.01); **B01J 23/66** (2013.01); **B01J 23/89** (2013.01); **B01J 35/23** (2024.01); **B01J 35/30** (2024.01); **B01J 35/393** (2024.01); **B01J 35/613** (2024.01); **B01J 35/647** (2024.01); **B01J 37/0201** (2013.01); **B01J 37/03** (2013.01); **C01B 3/16** (2013.01); **C01B 3/583** (2013.01); **C07C 29/1518** (2013.01); **C01B 2203/0283** (2013.01); **C01B 2203/044** (2013.01); **C01B 2203/047** (2013.01); **C01B 2203/066** (2013.01); **C01B 2203/1041** (2013.01); **H01M 8/0612** (2013.01); **Y02E 60/50** (2013.01); **Y02P 20/52** (2015.11); **Y02P 70/50** (2015.11)

C-Set (source: EP)

C07C 29/1518 + C07C 31/04

Cited by

CN107115861A; CN104353456A

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 SE SI SK TR

DOCDB simple family (publication)

WO 03068389 A1 20030821; AU 2003212201 A1 20030904; DE 10205873 A1 20030821; EP 1478459 A1 20041124

DOCDB simple family (application)

DE 0300439 W 20030213; AU 2003212201 A 20030213; DE 10205873 A 20020213; EP 03708030 A 20030213