

Title (en)
CHROMA ALUMINA CATALYSTS FOR ALKANE DEHYDROGENATION

Title (de)
CHROMALUMINIUMKATALYSATOREN ZUR ALKANDEHYDRIERUNG

Title (fr)
CATALYSEURS D'OXYDE DE CHROME ET D'ALUMINIUM POUR LA DÉSHYDROGÉNATION D'ALCANES

Publication
EP 2794091 A1 20141029 (EN)

Application
EP 12885121 A 20120920

Priority
US 2012056300 W 20120920

Abstract (en)
[origin: WO2014046659A1] Provided are methods of making dehydrogenation catalyst supports containing bayerite and silica. Silica-stabilized alumina powder, prepared by spray drying of bayerite powder, precipitating silica in a bayerite slurry with an acid, or impregnation or co -extrusion of bayerite with sodium silicate solution was found to be a superior catalyst support precursor. Catalysts prepared with these silica containing support materials have higher hydrothermal stability than current CATOFIN® catalysts. Also provided is a dehydrogenation catalyst comprising Cr₂O₃, an alkali metal oxide, SiO₂ and Al₂O₃, and methods of using said catalyst to make an olefin and/or dehydrogenate a dehydrogenatable hydrocarbon.

IPC 8 full level
B01J 21/08 (2006.01); **B01J 6/00** (2006.01); **B01J 37/03** (2006.01)

CPC (source: EP)
B01J 21/12 (2013.01); **B01J 23/002** (2013.01); **B01J 23/26** (2013.01); **B01J 35/613** (2024.01); **B01J 37/0045** (2013.01); **B01J 37/0201** (2013.01); **B01J 37/031** (2013.01); **C07C 5/3332** (2013.01); **B01J 35/40** (2024.01); **B01J 35/55** (2024.01); **B01J 37/0009** (2013.01); **B01J 2235/15** (2024.01); **B01J 2523/00** (2013.01); **C07C 2521/04** (2013.01); **C07C 2521/08** (2013.01); **C07C 2523/26** (2013.01); **Y02P 20/52** (2015.11)

C-Set (source: EP)
1. **B01J 2523/00** + **B01J 2523/12** + **B01J 2523/31** + **B01J 2523/41** + **B01J 2523/67**
2. **C07C 5/3332** + **C07C 11/06**

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
WO 2014046659 A1 20140327; CN 104010725 A 20140827; EP 2794091 A1 20141029; EP 2794091 A4 20150923;
KR 20150058093 A 20150528

DOCDB simple family (application)
US 2012056300 W 20120920; CN 201280057106 A 20120920; EP 12885121 A 20120920; KR 20147010113 A 20120920