

Title (en)

METHOD FOR PRODUCING A SHELL CATALYST AND CORRESPONDING SHELL CATALYST

Title (de)

VERFAHREN ZUR HESTELLUNG EINES SCHALENKATALYSATORS UND SCHALENKATALYSATOR

Title (fr)

PROCÉDÉ DE PRODUCTION D'UN CATALYSEUR SOUS ENVELOPPE ET CATALYSEUR SOUS ENVELOPPE

Publication

EP 2158037 A2 20100303 (DE)

Application

EP 08758903 A 20080530

Priority

- EP 2008004332 W 20080530
- DE 102007025356 A 20070531

Abstract (en)

[origin: WO2008145391A2] The invention relates to a method for producing a shell catalyst which comprises a porous molded catalyst support having an outer shell in which at least one transition metal is contained in metallic form. The aim of the invention is to provide a shell catalyst production method which allows production of supported transition metal catalysts in the form of shell catalysts that have a relatively little shell thickness. The method according to the invention makes use of a device (10) which is adapted to cause the molded catalyst supports to circulate by means of a reducing process gas (40). Said method comprises the following steps: a) feeding molded catalyst supports to the device (10) and causing the molded catalyst supports to circulate by means of a reducing process gas (40); b) impregnating an outer shell of the molded catalyst supports with a transition metal precursor compound by spraying the circulating molded catalyst supports with a solution that contains the transition metal precursor compound; c) converting the metal component of the transition metal precursor compound to the metallic form by reduction with the process gas (40); d) drying the molded catalyst supports that are sprayed with said solution.

IPC 8 full level

B01J 23/42 (2006.01); **B01J 23/44** (2006.01); **B01J 23/50** (2006.01); **B01J 23/52** (2006.01); **B01J 23/58** (2006.01); **B01J 23/72** (2006.01); **B01J 23/75** (2006.01); **B01J 23/755** (2006.01); **B01J 35/00** (2006.01); **B01J 35/08** (2006.01); **B01J 35/10** (2006.01); **B01J 37/02** (2006.01)

CPC (source: EP US)

B01J 23/42 (2013.01 - EP US); **B01J 23/44** (2013.01 - EP US); **B01J 23/50** (2013.01 - EP US); **B01J 23/52** (2013.01 - EP US); **B01J 23/58** (2013.01 - EP US); **B01J 23/72** (2013.01 - EP US); **B01J 23/75** (2013.01 - EP US); **B01J 23/755** (2013.01 - EP US); **B01J 35/30** (2024.01 - EP US); **B01J 35/397** (2024.01 - EP US); **B01J 35/51** (2024.01 - EP US); **B01J 35/60** (2024.01 - EP US); **B01J 37/0221** (2013.01 - EP US); **B01J 37/16** (2013.01 - EP US); **B01J 35/394** (2024.01 - EP US); **B01J 35/613** (2024.01 - EP US); **B01J 35/633** (2024.01 - EP US); **B01J 35/635** (2024.01 - EP US); **B01J 35/647** (2024.01 - EP US); **B01J 35/66** (2024.01 - EP US)

Citation (search report)

See references of WO 2008145391A2

Cited by

CN113101910A

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

WO 2008145391 A2 20081204; **WO 2008145391 A3 20090416**; CN 101687179 A 20100331; CN 101687179 B 20140212; DE 102007025356 A1 20090108; EP 2158037 A2 20100303; US 2010190638 A1 20100729

DOCDB simple family (application)

EP 2008004332 W 20080530; CN 200880018254 A 20080530; DE 102007025356 A 20070531; EP 08758903 A 20080530; US 60202608 A 20080530