

Title (en)
CATALYST SYSTEM FOR OXIDIZING O-XYLOL AND/OR NAPHTHALENE INTO PHTHALIC ANHYDRIDE

Title (de)
KATALYSATORSYSTEM ZUR OXIDATION VON O-XYLOL UND/ODER NAPHTHALIN ZU PHTHALSÄUREANHYDRID

Title (fr)
SYSTÈME CATALYSEUR POUR L'OXYDATION D'O-XYLÈNE ET/OU DE NAPHTALÈNE EN ANHYDRIDE PHTALIQUE

Publication
EP 3107654 A1 20161228 (DE)

Application
EP 15706733 A 20150217

Priority
• EP 14155332 A 20140217
• EP 2015053267 W 20150217

Abstract (en)
[origin: WO2015121483A1] The invention relates to a catalyst system for oxidizing o-xylol and/or naphthalene into phthalic anhydride (PA), which catalyst system comprises a plurality of catalyst layers arranged one after the other in the reaction tube, for the production of which catalyst system an antimony trioxide was used, which contains an appreciable fraction of senarmontite, some of the primary crystallites of which have a size of less than 200 nm. The present invention further relates to a method for gas-phase oxidation, wherein a gas flow, which comprises at least one hydrocarbon and molecular oxygen, is conducted through a catalyst system, which comprises a plurality of catalyst layers arranged one after the other in the reaction tube and for the production of which an antimony trioxide was used, which contains an appreciable fraction of senarmontite, some of the primary crystallites of which have a size of less than 200 nm.

IPC 8 full level
B01J 23/18 (2006.01); **B01J 23/22** (2006.01); **B01J 27/198** (2006.01); **B01J 35/00** (2024.01); **C07C 15/24** (2006.01)

CPC (source: CN EP US)
B01J 8/06 (2013.01 - US); **B01J 23/18** (2013.01 - CN EP US); **B01J 23/22** (2013.01 - CN EP US); **B01J 27/198** (2013.01 - CN EP US); **B01J 35/19** (2024.01 - CN EP US); **B01J 35/40** (2024.01 - CN EP US); **B01J 35/77** (2024.01 - EP); **C01G 30/005** (2013.01 - US); **C07D 307/89** (2013.01 - CN EP US); **B01J 2208/06** (2013.01 - US); **B01J 2523/00** (2013.01 - CN EP US); **C01P 2002/60** (2013.01 - US)

C-Set (source: CN EP US)
CN
B01J 2523/00 + B01J 2523/47 + B01J 2523/53 + B01J 2523/55

EP US
1. **B01J 2523/00 + B01J 2523/15 + B01J 2523/47 + B01J 2523/53 + B01J 2523/55**
2. **B01J 2523/00 + B01J 2523/47 + B01J 2523/51 + B01J 2523/55**

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 2015121483 A1 20150820; CN 105992647 A 20161005; EP 3107654 A1 20161228; JP 2017512127 A 20170518; JP 6563410 B2 20190821; US 2017008866 A1 20170112; US 9868713 B2 20180116

DOCDB simple family (application)
EP 2015053267 W 20150217; CN 201580007912 A 20150217; EP 15706733 A 20150217; JP 2016552559 A 20150217; US 201515119238 A 20150217