

Title (en)
POLYNARY METAL OXIDE PHOSPHATE

Title (de)
POLYNÄRES METALLOXIDPHOSPHAT

Title (fr)
PHOSPHATE POLYNAIRE D'OXYDE MÉTALLIQUE

Publication
EP 2137103 A2 20091230 (DE)

Application
EP 08717691 A 20080312

Priority
• EP 2008052945 W 20080312
• DE 102007012724 A 20070316

Abstract (en)
[origin: WO2008113728A2] The invention relates to a novel polynary metal oxide phosphate of general formula $M_{a/2}(VO)(P_{2/2}O_{7/2})_b(PO_{4/2})_c$ (I), wherein M represents one or more metals selected from the group including V, Ti, Zr, Hf, Cr, Fe, Co, Ni, Ru, Rh, Pd, Cu, Zn, Cd, Hg, B, Be, Mg, Ca, Sr and Ba, a has a value of 1.5 to 2.5, b has a value of 0.5 to 1.5, c has a value of 0.5 to 1.5, said novel compound having a crystal structure and being characterized by defined diffraction reflexes in powder X-ray diffraction. A preferred representative is $Fe_{2/2}VO(P_{2/2}O_{7/2})_b(PO_{4/2})_c$. The metal oxide phosphates are suitable as gas phase oxidation catalysts, e.g. for producing maleic anhydride from a hydrocarbon with at least four carbon atoms.

IPC 8 full level
C01B 25/40 (2006.01); **B01J 27/198** (2006.01); **C07C 51/215** (2006.01); **C07C 57/145** (2006.01); **C07D 307/34** (2006.01)

CPC (source: EP US)
B01J 23/002 (2013.01 - EP US); **B01J 27/198** (2013.01 - EP US); **B01J 35/30** (2024.01 - EP US); **B01J 37/0036** (2013.01 - EP US); **B01J 37/08** (2013.01 - EP US); **C01B 25/40** (2013.01 - EP US); **C07C 51/215** (2013.01 - EP US); **C07D 307/34** (2013.01 - EP US); **B01J 27/199** (2013.01 - EP US); **B01J 37/16** (2013.01 - EP US); **B01J 2523/00** (2013.01 - EP US)

C-Set (source: EP US)
1. **C07C 51/215 + C07C 57/145**
2. **B01J 2523/00 + B01J 2523/51 + B01J 2523/55 + B01J 2523/842**

Citation (search report)
See references of WO 2008113728A2

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

DOCDB simple family (publication)
DE 102007012724 A1 20080918; EP 2137103 A2 20091230; JP 2010521400 A 20100624; US 2010069650 A1 20100318; WO 2008113728 A2 20080925; WO 2008113728 A3 20081224

DOCDB simple family (application)
DE 102007012724 A 20070316; EP 08717691 A 20080312; EP 2008052945 W 20080312; JP 2009554000 A 20080312; US 53156108 A 20080312