

Title (en)
POLYNARY METAL VANADIUM OXIDE PHOSPHATE

Title (de)
POLYNÄRES METALL-VANADIUMOXIDPHOSPHAT

Title (fr)
PHOSPHATE POLYNAIRE D'OXYDE DE VANADIUM ET DE MÉTAL

Publication
EP 2137105 A2 20091230 (DE)

Application
EP 08717693 A 20080312

Priority
• EP 2008052947 W 20080312
• DE 102007012722 A 20070316

Abstract (en)
[origin: WO2008113729A2] The invention relates to a novel polynary metal oxide phosphate of general formula $M_{a'}V_{b'}(PO_4)_c$ (I), wherein M represents one or more metals selected from the group including V, Cr, Fe, Co, Ni, Ru, Rh, Pd, Cu, Zn, Cd, Hg, Be, Mg, Ca, Sr and Ba, a has a value of 0.5 to 1.5, b has a value of 1.5 to 2.5, c has a value of 1.5 to 2.5, said novel compound having a crystal structure and being characterized by defined diffraction reflexes in powder X-ray diffraction. Preferred representatives are $CoV_2O_2(PO_4)_2$, $NiV_2O_2(PO_4)_2$ or $CuV_2O_2(PO_4)_2$. 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 25/45 (2006.01); **B01J 27/198** (2006.01); **C07C 51/215** (2006.01); **C07C 57/145** (2006.01)

CPC (source: EP US)
B01J 23/002 (2013.01 - EP US); **B01J 27/198** (2013.01 - EP US); **B01J 35/19** (2024.01 - EP US); **B01J 35/30** (2024.01 - EP US);
C01B 25/45 (2013.01 - EP US); **C07C 51/215** (2013.01 - EP US); **C07C 51/252** (2013.01 - EP US); **C07D 307/60** (2013.01 - EP US);
B01J 35/612 (2024.01 - EP US); **B01J 37/0045** (2013.01 - EP US); **B01J 2523/00** (2013.01 - EP US)

C-Set (source: EP US)
1. **B01J 2523/00 + B01J 2523/51 + B01J 2523/55 + B01J 2523/847**
2. **B01J 2523/00 + B01J 2523/17 + B01J 2523/51 + B01J 2523/55**
3. **B01J 2523/00 + B01J 2523/51 + B01J 2523/55 + B01J 2523/845**

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 102007012722 A1 20080918; EP 2137105 A2 20091230; JP 2010521401 A 20100624; US 2010087663 A1 20100408;
WO 2008113729 A2 20080925; WO 2008113729 A3 20081224

DOCDB simple family (application)
DE 102007012722 A 20070316; EP 08717693 A 20080312; EP 2008052947 W 20080312; JP 2009554001 A 20080312;
US 53153708 A 20080312