

Title (en)  
POLYNARY VANADYL PYROPHOSPHATE

Title (de)  
POLYNÄRES VANADYLPYROPHOSPHAT

Title (fr)  
PYROPHOSPHATE DE VANADYLE POLYNAIRE

Publication  
**EP 2137104 A2 20091230 (DE)**

Application  
**EP 08717694 A 20080312**

Priority  
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• DE 102007012723 A 20070316

Abstract (en)  
[origin: WO2008113730A2] The invention relates to a novel polynary vanadyl pyrophosphate of general formula (VO)<sub>a</sub>(M<sub>1-b</sub>V<sub>b</sub>)<sub>2</sub>(P<sub>2</sub>O<sub>7</sub>)<sub>c</sub> (I), wherein M represents one or more metals selected from the group including Ti, Zr, Hf, Cr, Fe, Co, Ni, Ru, Rh, Pd, Cu, Zn, B, Al, Ga and In, a has a value of 0.5 to 1.5, b has a value of 0 to 0.9, 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. A preferred representative is (VO)Fe<sub>2</sub>(P<sub>2</sub>O<sub>7</sub>)<sub>2</sub>. The vanadyl pyrophosphates are suitable as gas phase oxidation catalysts, e.g. for producing maleic anhydride from a hydrocarbon with at least four carbon atoms.

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