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(54) Title: CATALYST AND PROCESS FOR THE DEHYDROGENATION OF ALKANES TO OLEFINS

(1)

2 θ ($\pm$ 0.3°)	Rel. Intensity (%)
5.3	0.2 – 10
6.6	1.5 – 15
7.84	2.5 – 45
8.95	4 – 21
22.17	100
27.2	20 – 70

(57) Abstract: An oxidative dehydrogenation catalyst having: a structure having a formula $\text{Mo}_u\text{V}_v\text{Nb}_w\text{Sb}_y\text{Bi}_z\text{O}_x$, where u is 1, v is from 0.1 to 0.5, w is from 0.001 to 0.3, y is from 0.001 to 0.2, z is from 0.03 to 0.2, and x is the oxygen content required to charge-balance the structure. The oxidative dehydrogenation catalyst comprises a crystalline structure (Pba2-32 space group) characterized by reflections determined with Cu-K α X-ray diffraction (XRD) as in Table (1).

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