

**MD.28.**

**Title**

**n-BUTANOL SENSOR BASED ON ZnO-Al<sub>2</sub>O<sub>3</sub> HETEROJUNCTION.**

**Authors**

Magariu Nicolae, Trofim Viorel, Lupan Oleg

**Institution**

**Technical University of Moldova**

**Patent no.**

Deposit Nr. s 2020 0049 from 2020.05.13

**Description**

The invention relates to the technique and technology of oxide semiconductors, in particular to butanol sensors based on ZnO-Al<sub>2</sub>O<sub>3</sub> heteronjunctions. Butanol is widely used as a solvent for the manufacture of varnishes and paints. For butanol, the odor threshold is at 14-16 ppm, but the permissible limit of its concentration in air  $\approx$  3.3 ppm. For these reasons it is necessary to make sensors sensitive to low concentrations of butanol. The problem solved by the proposed invention is the manufacture of an n-Butanol sensor with a higher sensitivity to low gas concentrations.

**EN**

**Class no.**

12. Safety, protection and rescue of people