

**98-0199**

The invention refers to the solid body electronics, electronic technique, dimensions of quantity effects study allowing to reveal the limit dimensions of the electronic apparatuses using the classical conductivity, to different electronic elements development: frequency convectors, transistors, temperature sensors and others, as well as to the study of anisotropic mechanical and electrophysical crystals characteristics.

Summary of the process for obtaining micro-dimensioned monocrystals of spherical shape under action of the bismuth sample local heating into the glass cylindrical envelope consists in utilization of the superficial tension force action during the crystallization of a small volume drop.

In the proposed process for obtaining micro-spheres of the same diameter and accurate definition of number thereof into the dielectric matrix by means of a focused laser beam, the monocrystallic bismuth micronic filament is locally heated up to  $(500\pm 10)^{\circ}\text{C}$  into a glass envelope and fixed to a quartz support.