s 2019 0002

The invention relates to the field of production of thermoelectric materials with directed anisotropy, namely to a process for recrystallization of bismuth microwire in glass insulation.

The process for recrystallization of bismuth microwire in glass insulation consists in that the moving bismuth microwire is heated to the melting temperature, forming a molten zone that moves along the microwire motion through a capacitor that generates a strong electric field, where it recrystallizes in a water crystallizer with the direction of the crystallographic axis C_3 of the microwire in the direction of the electric field. The capacitor is made of two copper plates, placed at a distance of 1 cm from one another.

Claims: 1 Fig.: 5