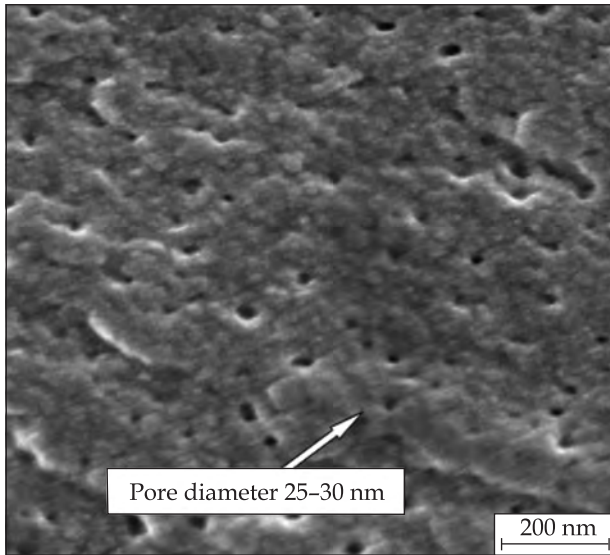


NANOPOROUS FILTER MATERIALS



High-strength nanoporous track-etched membranes made of polycyanurate obtained on ion-electron device

Specification

The technology is based on bombarding polymer materials by heavy charged particles with further irradiating with picowave radiation. It differs from similar technologies by the use of ion cyclotron U-120 and 4 MeV electron accelerator. The production capacity is 800 sq. m. material monthly. The ion energy is 24 MeV or higher. The pore diameter ranges from 25 to 30 nm

Stage of Development. Suggestions for Commercialization

IRL3, TRL3
Nanoporous filtering materials

Areas of Application

The nanoporous filter materials based on nuclear track membranes are to be used for the ultra-filtration in advanced industrial processes in medicine (for hemodialysis), electrical engineering (for production of chemical power sources), metrology (for gas purification), food industry (as semitransparent packing materials), etc.

Advantages

There are no analogs in Ukraine.
The materials are cheaper than the foreign counterparts

IPR Protection

IPR3

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