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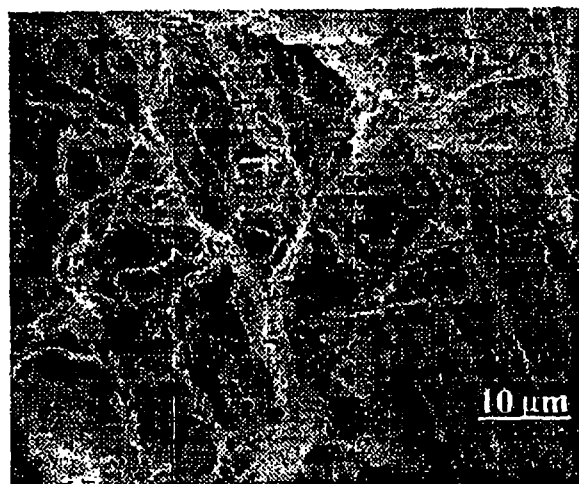
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(54) Title: PYROTECHNICAL AEROSOL-FORMING FIRE-EXTINGUISHING COMPOSITE AND A METHOD OF ITS PRO-
DUCTION



oxidizer

burning binder

polytetrafluoroethylene

10 μm



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(57) **Abstract:** This invention relates to the field of fire-fighting equipment, specifically to means of fire fighting by a fire-extinguish-
ing aerosol that is formed during burning of pyrotechnical composite and a method of its production. The invention allows to prepare
pyrotechnical, aerosol-forming fire-extinguishing composite with good deformation strength characteristics, low fire-extinguishing
concentration and regulate burning velocity. The pyrotechnical aerosol-forming fire-extinguishing composite contains an oxidizer,
a production process additive and burning binder formed by thermoplastic formaldehyde and phenol polycondensate, plasticized by
dicarboxylic acid ester and reinforced by polytetrafluoroethylene. The method of producing the composite consists of mixing of
formaldehyde and phenol polycondensate suspension in an organic solvent and polytetrafluoroethylene dispersion in dicarboxylic
acid ester, mixing the resulting composition with an oxidizer and a production process additive with subsequent thermomechanical
effect. The invention can be used for fire-extinguishing in different structures and devices without harmful effect on human body
and living organisms, nature.

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