

Title (en)
METHODS FOR PRODUCING PERCURSOR MATERIAL FOR THE PRODUCTION OF HIGH-TEMPERATURE SUPERCONDUCTING WIRES

Title (de)
VERFAHREN ZUR HERSTELLUNG VON PRECURSORMATERIAL FÜR DIE PRODUKTION VON HOCHTEMPERATURSUPRALEITER-DRÄHTEN

Title (fr)
PROCEDES POUR PRODUIRE UN MATERIAU PRECURSEUR EN VUE DE LA FABRICATION DE FILS SUPRACONDUCTEURS A HAUTE TEMPERATURE

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Application
EP 99908831 A 19990128

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• EP 9900566 W 19990128

Abstract (en)
[origin: CA2318113A1] The invention relates to methods for producing a high-temperature superconductor precursor material for use in the production of strips or wire. According to said methods a mixture of oxides and/or their precursors is prepared, the mixture is heated to a temperature at which it presents a readily mixable and pourable melt in which individual phases can possibly still be present in the solid state, and the melt is introduced into an envelope where it solidifies as it cools. The melt solidifies at such a speed that substantially no reaction layer is formed from the material constituting the envelope and that of the melt. The solidified molten body is heated in an annealing furnace to a temperature at which the molten body material is converted into a precursor material containing at least 10 weight % of at least one high-temperature superconductive and/or high-temperature superconducting phase. No grinding takes place after melting of the mixture.

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