Title (en)

SUPRACONDUCTOR STRUCTURE WITH A GLASS SUBSTRATE AND A HIGH TEMPERATURE SUPRACONDUCTOR DEPOSITED THEREON IN ADDITION TO A METHOD FOR PRODUCING SAID STRUCTURE

Title (de)

SUPRALEITERAUFBAU MIT GLASSUBSTRAT UND DARAUF ABGESCHIEDENEM HOCHTEMPERATURSUPRALEITER SOWIE VERFAHREN ZUR HERSTELLUNG DES AUFBAUS

Title (fr)

STRUCTURE SUPRACONDUCTRICE COMPORTANT UN SUBSTRAT DE VERRE SUR LEQUEL EST DEPOSE UN SUPRACONDUCTEUR HAUTE TEMPERATURE, ET PROCEDE DE PRODUCTION DE CETTE STRUCTURE

Publication

EP 1027737 A1 20000816 (DE)

Application

EP 98961034 A 19981023

Priority

- DE 9803116 W 19981023
- DE 19747767 A 19971029

Abstract (en)

[origin: WO9922412A1] The supraconductor structure (2) comprises a substrate (3) made of a temperature resistant glass material, a buffer layer (4) deposited on said substrate, and a layer (5) deposited thereon which is made of a metal oxidic high-Tc-supraconductor-material. A glass material should be provided which has a thermal coefficient of expansion greater than 6 times 10<-6> K<-1> and a transformation temperature greater than 550 DEG C. In order to produce the structure, at least one depositing method is selected in which the maximum temperature is no more than 100 K higher than the transformation temperature of the glass material.

IPC 1-7

H01L 39/24

IPC 8 full level

C03C 17/34 (2006.01); **C30B 29/22** (2006.01); **H01B 12/06** (2006.01); **H01B 13/00** (2006.01); **H01L 39/02** (2006.01); **H01L 39/16** (2006.01); **H01L 39/24** (2006.01)

CPC (source: EP US)

H01L 39/16 (2013.01 - EP US); **H01L 39/2454** (2013.01 - EP US)

Designated contracting state (EPC)

CH DE FR GB IT LI

DOCDB simple family (publication)

WO 9922412 A1 19990506; CA 2309086 A1 19990506; EP 1027737 A1 20000816; JP 2001521298 A 20011106; US 6309767 B1 20011030

DOCDB simple family (application)

DE 9803116 W 19981023; CA 2309086 A 19981023; EP 98961034 A 19981023; JP 2000518417 A 19981023; US 56339300 A 20000501