

Title (en)

METALLIZED INTERLAYERS IN HIGH-TC CUPRATE SUPERCONDUCTORS

Title (de)

METALLISIERTE ZWISCHENSCHICHTEN IN EINEM HOCHTEMPERATUR-KUPRATSUPRALEITER

Title (fr)

COUCHES INTERMEDIAIRES METALLISEES POUR SUPRACONDUCTEURS AU CUPRATES A TEMPERATURE DE TRANSITION ELEVEE

Publication

EP 0914680 A2 19990512 (EN)

Application

EP 97924405 A 19970609

Priority

- NZ 9700075 W 19970609
- NZ 28676696 A 19960607

Abstract (en)

[origin: WO9749118A2] A method of preparing a high temperature superconducting cuprate material (HTSC) to have increased critical current consists of metallizing non-superconducting intermediate layers between the superconducting layers in the crystalline structure of the material, so that superconductivity is induced in the intermediate layer(s) between the superconducting layers by proximity effect. Typically oxygen is added into the intermediate layers during preparation of the HTSC material such as the Bi-O layers in Bi-Sr-Ca-Cu-O materials. The TlO layers in Tl-Sr-Ca-Cu-O materials, and the Hg layer in Hg-Ba-Ca-Cu-O materials.

IPC 1-7

H01L 39/00; **H01B 12/00**; **C01F 11/00**

IPC 8 full level

H10N 60/20 (2023.01); **H10N 60/85** (2023.01)

CPC (source: EP)

H10N 60/857 (2023.02)

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

WO 9749118 A2 19971224; **WO 9749118 A3 19980226**; AU 2983197 A 19980107; EP 0914680 A2 19990512

DOCDB simple family (application)

NZ 9700075 W 19970609; AU 2983197 A 19970609; EP 97924405 A 19970609