

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  

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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.

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