Title (en)

HIGH TEMPERATURE SUPERCONDUCTING FILMS ON ALUMINUM OXIDE SUBSTRATES.

Title (de)

Hochtemperatur supraleitende Schichten auf Aluminium-Oxid Substraten.

Title (fr)

FILMS SUPRACONDUCTEURS A HAUTE TEMPERATURE SUR SUBSTRATS D'OXYDE D'ALUMINIUM.

Publication

**EP 0610175 A4 19930301 (EN)**

Application

**EP 91907776 A 19910318**

Priority

- US 9101788 W 19910318
- US 49473090 A 19900316
- US 49556890 A 19900316
- US 56569190 A 19900813

Abstract (en)

[origin: WO9114028A1] High temperature superconducting layered structures for use in microwave applications are fabricated by depositing a thin film of epitaxial buffer (14) such as strontium titanate or calcium titanate by a deposition process such as laser ablation on a low loss sapphire substrate (12) followed by depositing an in-situ grown film of high temperature superconductor (16) such as Y1Ba2Cu3O7 on the buffer layer. The YBCO film has low surface resistance and a narrow transition temperature.

IPC 1-7

**C30B 25/04**; C30B 23/02

IPC 8 full level

**C30B 23/02** (2006.01); **C30B 25/02** (2006.01); **H10N 60/01** (2023.01)

CPC (source: EP)

**C30B 23/02** (2013.01); **C30B 25/02** (2013.01); **C30B 29/22** (2013.01); **C30B 29/225** (2013.01); **H10N 60/0632** (2023.02)

C-Set (source: EP)

1. **C30B 23/02** + **C30B 29/22**
2. **C30B 25/02** + **C30B 29/22**

Citation (search report)

- [A] DE 3834402 C1 19890503
- [X] Section Ch, Week 8528, 30 May 1985 Derwent Publications Ltd., London, GB; Class CH, AN 85-167860 & JP-A-60 096 599 (NIPPON TELEGR & TELEPH.) 30 May 1985
- [XP] JOURNAL OF CRYSTAL GROWTH. vol. 109, no. 1/4, February 1991, AMSTERDAM NL pages 401 - 417 SCHIEBER ET AL 'deposition of high temperature superconducting films'
- See also references of WO 9114028A1

Designated contracting state (EPC)

AT BE CH DE DK ES FR GB GR IT LI LU NL SE

DOCDB simple family (publication)

**WO 9114028 A1 19910919**; AU 7653391 A 19911010; EP 0610175 A1 19940817; EP 0610175 A4 19930301

DOCDB simple family (application)

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