

Title (en)

POWDER-METALLURGICAL PROCESS FOR PRODUCING A SUPERCONDUCTING-FIBRE COMPOSITE MATERIAL

Publication

EP 0016961 B1 19840208 (DE)

Application

EP 80100955 A 19800226

Priority

DE 2909290 A 19790309

Abstract (en)

[origin: US4336065A] A method for manufacturing a composite material by powder metallurgy wherein a starting material comprised of at least one body-centered cubic metal powder component, and contaminated by oxygen in its bulk or on its surface is mixed with a less noble supplemental component having a greater binding enthalpy for oxygen in powder form or as an alloy whereby the oxygen contaminant becomes bound to the supplemental component by internal solid-state reduction. The composite mixture is then deformed in at least one dimension to form ribbons or fibers thereof.

IPC 1-7

C22C 1/04; **C22C 1/10**; **C22C 9/00**

IPC 8 full level

C22C 1/04 (2006.01); **C22C 1/10** (2006.01); **C22C 32/00** (2006.01)

CPC (source: EP US)

C22C 1/0425 (2013.01 - EP US); **C22C 1/1078** (2013.01 - EP US); **C22C 32/0021** (2013.01 - EP US); **Y10S 505/807** (2013.01 - EP); **Y10S 505/823** (2013.01 - EP)

Citation (examination)

- HANDBOOK of Chemistry and Physics, 60th Edition, D-67, D-70, D-72
- Zeitschrift für Metallkunde, Band 65, Mai 1974, Heft 5, Seiten 395 and 396

Designated contracting state (EPC)

CH FR GB

DOCDB simple family (publication)

EP 0016961 A1 19801015; **EP 0016961 B1 19840208**; DE 2909290 A1 19800911; DE 2909290 C2 19840809; US 4336065 A 19820622

DOCDB simple family (application)

EP 80100955 A 19800226; DE 2909290 A 19790309; US 12472380 A 19800226