

Title (en)
SUPERCONDUCTING MATERIALS AND METHODS OF SYNTHESIS

Title (de)
SUPRALEITENDE MATERIALIEN UND SYNTHESEVERFAHREN

Title (fr)
MATÉRIAUX SUPERCONDUCTEURS ET PROCÉDÉS DE SYNTHÈSE

Publication
EP 2062302 A4 20121128 (EN)

Application
EP 07719117 A 20070625

Priority
• AU 2007000878 W 20070625
• AU 2006903394 A 20060623

Abstract (en)
[origin: WO2007147219A1] Superconducting materials and methods of synthesizing the superconducting materials are disclosed. Embodiments of the methods include mixing at least two starting materials capable of forming a M_gB₂ superconducting material with at least one organic dopant compound, the organic dopant compound comprising carbon, hydrogen and oxygen. The method further includes shaping the mixed materials into a desired shape and heating the mixed materials to produce a carbon-doped M_gB₂ super-conducting material.

IPC 8 full level
H10N 60/85 (2023.01); **C04B 35/58** (2006.01); **H01B 12/04** (2006.01); **H10N 60/01** (2023.01)

CPC (source: EP)
C04B 35/58057 (2013.01); **C04B 35/636** (2013.01); **H10N 60/0856** (2023.02); **C04B 2235/422** (2013.01); **C04B 2235/449** (2013.01); **C04B 2235/48** (2013.01); **C04B 2235/6562** (2013.01); **C04B 2235/6567** (2013.01); **C04B 2235/761** (2013.01); **C04B 2235/80** (2013.01)

Citation (search report)
• [X] DATABASE COMPENDEX [online] ENGINEERING INFORMATION, INC., NEW YORK, NY, US; July 2004 (2004-07-01), OCHSENKUHN-PETROPOULOU M T ET AL: "Superconducting coatings of MgB2 prepared by electrophoretic deposition", XP055041182, Database accession no. E2005279194004 & ANALYTICAL AND BIOANALYTICAL CHEMISTRY JULY 2004 SPRINGER VERLAG DE, vol. 379, no. 5-6, July 2004 (2004-07-01), pages 792 - 795, DOI: 10.1007/S00216-004-2668-0
• [A] SERQUIS A ET AL: "Degradation of MgB2 under ambient environment", APPLIED PHYSICS LETTERS, AIP, AMERICAN INSTITUTE OF PHYSICS, MELVILLE, NY, US, vol. 80, no. 23, 10 June 2002 (2002-06-10), pages 4401 - 4403, XP012031156, ISSN: 0003-6951, DOI: 10.1063/1.1481548
• See also references of WO 2007147219A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA HR MK RS

DOCDB simple family (publication)
WO 2007147219 A1 20071227; EP 2062302 A1 20090527; EP 2062302 A4 20121128

DOCDB simple family (application)
AU 2007000878 W 20070625; EP 07719117 A 20070625