

Title (en)

Use of oxide ceramic materials or metal ceramic compounds for electrical applications like heaters

Title (de)

Verwendung von keramischen Oxidmaterialien oder metallkeramische Verbindungen für elektrische Anwendungen wie Heizelement

Title (fr)

Utilisation de matériaux d'oxyde de céramiques ou de composés céramiques métalliques pour des applications électriques de type élément chauffant

Publication

EP 2262346 A1 20101215 (EN)

Application

EP 09305525 A 20090610

Priority

EP 09305525 A 20090610

Abstract (en)

The present invention relates to the use of oxide ceramic materials or metal ceramic compounds, which have superconducting properties or can be converted to a superconducting state in non-superconducting electrical applications, for example as a material for resistive heaters. The material is selected from alkaline earth cuprate, rare earth alkaline cuprate, iron pnictides and magnesium diboride. The shape body can be obtained by a melt casting process. The material could be used for a heating element an ohmic resistor or an electrode suitable in electrical arc discharged.

IPC 8 full level

H05B 3/14 (2006.01); **H01C 1/034** (2006.01)

CPC (source: EP)

H01C 1/034 (2013.01); **H05B 3/141** (2013.01)

Citation (applicant)

- WO 9500443 A1 19950105 - DEVOE IRVING W [CA]
- DE 10141660 A1 20030306 - SINTERED PARTS AND SERVICES GM [DE]
- US 5750958 A 19980512 - OKUDA NORIO [JP], et al
- WO 9731878 A1 19970904 - UNIV GENEVE [CH]
- EP 0462409 B1 19940713 - HOECHST AG [DE]
- MÜNSTER A ET AL.: "Über einige elektrische Eigenschaften von Titannitrid und Titancarbid", ZEITSCHRIFT FÜR PHYSI, vol. 144, 1956, pages 139 - 151
- H. HOSONO ET AL., J. AM. CHEM. SOC., vol. 130, 2008, pages 3296

Citation (search report)

- [X] GB 1282023 A 19720719 - STANDARD TELEPHONES CABLES LTD [GB]
- [X] EP 0494128 A1 19920708 - PECHINEY ELECTROMETALLURGIE [FR]
- [Y] US 6291402 B1 20010918 - JIN SUNGHO [US], et al
- [Y] US 5073537 A 19911217 - HUNG LIANG-SUN [US], et al
- [Y] US 2007194870 A1 20070823 - TAKAHASHI MASAYA [JP], et al
- [Y] EP 1688514 A1 20060809 - DENKI KAGAKU KOGYO KK [JP]
- [A] US 2005231202 A1 20051020 - MORITA HIROSHI [JP], et al
- [A] WO 2005006455 A1 20050120 - ROLLS ROYCE PLC [GB], et al

Cited by

CN114937537A

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

EP 2262346 A1 20101215

DOCDB simple family (application)

EP 09305525 A 20090610