Title (en)

TEXTURED SUPERCONDUCTING BODIES AND METHOD OF PREPARING SAME

Publication

EP 0585339 A4 19950927 (EN)

Application

EP 92911727 A 19920312

Priority

US 68679291 A 19910417

Abstract (en)

[origin: WO9218989A1] An elongated superconducting body (68a) has a core of superconducting oxide grains (82). The grains have at least one thin first dimension that is less than or equal to ten times the average length of the superconducting oxide grains of a first significant fraction in the core. The body has a constraining non-superconducting boundary member substantially circumscribing the superconducting core (80). The superconducting body can be fabricated by providing a metallic precursor core of the metallic elements of the superconducting oxide in substantially the stoichiometric proportions to form the superconducting oxide; providing a constraining non-superconducting boundary member substantially circumscribing the metallic precursor core; deforming the combined metallic precursor core and boundary member to an elongated shape having at least one thin first dimension; and heat treating the deformed combined precursor core and boundary member so as to produce a first significant fraction of oxide superconductor grains of the precursor core having an average length that is greater than one-tenth the thin first dimension of the deformed metallic precursor core.

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H01B 12/00; H01L 39/12

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CPC (source: EP)

H10N 60/0801 (2023.02); H10N 60/203 (2023.02)

Citation (search report)

- [X] EP 0282286 A2 19880914 TOSHIBA KK [JP]
- [X] EP 0296477 A2 19881228 HITACHI LTD [JP]
- [X] EP 0357779 A1 19900314 MITSUBISHI METAL CORP [JP]
- See references of WO 9218989A1

Designated contracting state (EPC)

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DOCDB simple family (publication)

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DOCDB simple family (application)

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