

Title (en)

A METHOD OF ROLLING SUPERCONDUCTING CONDUCTOR LENGTHS AND ROLLER APPARATUS

Title (de)

VERFAHREN ZUM WALZEN EINES SUPRALEITER UND WALZENVORRICHTUNG

Title (fr)

PROCEDE DE PASSAGE ENTRE GALETS DE LONGUEURS DE CONDUCTEURS SUPRACONDUCTEURS ET GALET UTILISE A CET EFFET

Publication

EP 1021841 A2 20000726 (EN)

Application

EP 98933573 A 19980714

Priority

- DK 9800328 W 19980714
- DK 86597 A 19970715

Abstract (en)

[origin: WO9907025A2] A roller apparatus and a method of rolling in particular superconductors, wherein a roller apparatus is used that comprises two roller bodies arranged opposite each other whereby the roller bodies form opposed roller surface planes; and wherein means are arranged for driving the two roller elements about their axes of symmetry in such a manner that the element to be rolled is pulled in between the roller surface planes by the friction generated between the element to be rolled and the roller surface planes. In accordance with the invention, the roller apparatus is so configured that the roller bodies comprise at least two annular or tubular roller bodies; and wherein the annular or tubular roller bodies are further provided with surfaces that form an annular track; and in that the roller apparatus has a pressure device which is arranged for abutment on the annular track in such a manner that the roller surface planes are pressed towards each other; and wherein the pressure device is configured and located in such a manner that the pressure device is in abutment on only a fraction of the annular track on the annular or tubular rollers. Hereby it is possible to roll with very large roller diameters without ensuing significant risk of the rollers being undesirably deformed during the roller process. In particular for the rolling of superconductors, experiments have shown that improved properties are obtained for the rolled superconductor.

IPC 1-7

H01L 39/24; B21B 27/02

IPC 8 full level

B21B 1/16 (2006.01); **B21B 13/02** (2006.01); **B21B 13/14** (2006.01); **B21B 27/02** (2006.01); **B21C 37/04** (2006.01); **B22F 3/18** (2006.01); **H01L 39/24** (2006.01)

CPC (source: EP KR)

B21B 1/16 (2013.01 - EP); **B21B 13/02** (2013.01 - EP); **B21B 13/14** (2013.01 - EP); **B21B 27/02** (2013.01 - EP); **B21C 37/042** (2013.01 - EP); **B21C 37/045** (2013.01 - EP); **B22F 3/18** (2013.01 - EP); **H10N 60/01** (2023.02 - KR); **H10N 60/0801** (2023.02 - EP); **B22F 2998/00** (2013.01 - EP)

Citation (search report)

See references of WO 9907025A2

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

WO 9907025 A2 19990211; WO 9907025 A3 19990408; AU 732623 B2 20010426; AU 8334398 A 19990222; CA 2296388 A1 19990211; CN 1264497 A 20000823; EP 1021841 A2 20000726; JP 2001512053 A 20010821; KR 20010014437 A 20010226; NO 20000174 D0 20000113; NO 20000174 L 20000310; NZ 501977 A 20010629; SK 382000 A3 20000912

DOCDB simple family (application)

DK 9800328 W 19980714; AU 8334398 A 19980714; CA 2296388 A 19980714; CN 98807253 A 19980714; EP 98933573 A 19980714; JP 2000505657 A 19980714; KR 19997012631 A 19991231; NO 20000174 A 20000113; NZ 50197798 A 19980714; SK 382000 A 19980714