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

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Application

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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.

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