

Title (en)

METHOD FOR PROCESSING BILLETS OUT OF METALS AND ALLOYS AND THE ARTICLE

Title (de)

VERFAHREN ZUR BEARBEITUNG VON WERKSTÜCKEN AUS METALLEN UND LEGIERUNGEN UND DEREN ARTIKEL

Title (fr)

TRAITEMENT DE BILLETES OBTENUES A PARTIR DE METAUX ET D'ALLIAGES

Publication

EP 1124996 A1 20010822 (EN)

Application

EP 99949986 A 19990930

Priority

- RU 98117983 A 19981001
- US 9922564 W 19990930

Abstract (en)

[origin: WO0018973A1] This method refers to a method by which the physical and mechanical properties intrinsic to a fine-grain structure may be formed in metal billets using pressure treatment. The method is designed to treat rods, bars and other particularly long billets. This method is designed to lower the cost of deformational treatment for long rods and large diameter billets and creates a pre-specified microstructure, including micro-crystal structure, and specific physical and mechanical properties. This may be achieved using various treatment techniques, one of which includes the deformation of at least a part of the billet through reduction of the billets cross-section. In this method, a long rod shaped billet is used. Reduction of the cross-section is achieved using tools that permit movement along and across the billet's axis as well as being rolled about its surface, for example, a roller. In this case at least one support stand is employed for correct placement of the billet. Additionally, a pre-specified strain level is achieved using at least one of the techniques of deformation: torsion, settling and extension using tools, for example the above-mentioned stand. The stand is designed to apply a specified scheme of deformation to the billet at the deformed (strained) section and at a specified temperature. This obtains specified structure with intrinsic physical and mechanical properties.

IPC 1-7

C21D 8/06; **C22F 1/10**; **C22F 1/18**

IPC 8 full level

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CPC (source: EP KR)

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Citation (search report)

See references of WO 0018973A1

Cited by

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WO 0018973 A1 20000406; CN 1308465 C 20070404; CN 1329676 A 20020102; CZ 20011171 A3 20020515; EP 1124996 A1 20010822; IL 142241 A0 20020310; IL 142241 A 20050517; JP 2002525210 A 20020813; KR 20010075460 A 20010809; RU 2159162 C2 20001120

DOCDB simple family (application)

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