

Title (en)

Process for annealing metal work pieces in a hydrogen-enriched protective atmosphere in a continuous furnace.

Title (de)

Verfahren zum Glühen von Metallteilen unter wasserstoffreichem Schutzgas in einem Durchlaufofen.

Title (fr)

Procédé pour le recuit de pièces métalliques dans une atmosphère protectrice riche en hydrogène dans un four continu.

Publication

EP 0379104 B1 19931027 (DE)

Application

EP 90100679 A 19900113

Priority

- DE 3901215 A 19890117
- DE 3926417 A 19890810

Abstract (en)

[origin: EP0379104A1] The invention relates to a process for annealing metal work pieces in a protective hydrogen gas in a furnace, wherein, to reduce the amount of protective gas required and as an additional process parameter, gas with a higher density than hydrogen is blown into the leakage openings of the continuous furnace, for example and in particular at the inlet (11) and outlet (4) of the furnace and is thus mixed with the protective gas situated there, whereas in the rest of the continuous furnace the hydrogen-enriched protective atmosphere is maintained in accordance with the heat treatment to be carried out. <IMAGE>

IPC 1-7

C21D 9/56; C21D 1/74

IPC 8 full level

C21D 1/74 (2006.01); **C21D 9/56** (2006.01)

CPC (source: EP)

C21D 1/74 (2013.01); **C21D 9/565** (2013.01)

Citation (examination)

- DD 31283 A
- GB 995883 A 19650623 - DAVY & UNITED ENG CO LTD
- DE 3809516 A1 19891005 - MESSER GRIESHEIM GMBH [DE], et al

Cited by

BE1015109A3; EA008419B1; WO2004024959A1; US7384489B2

Designated contracting state (EPC)

AT BE DE FR IT LU NL

DOCDB simple family (publication)

EP 0379104 A1 19900725; EP 0379104 B1 19931027; DE 3926417 A1 19900719; DE 59003173 D1 19931202; JP H02228420 A 19900911

DOCDB simple family (application)

EP 90100679 A 19900113; DE 3926417 A 19890810; DE 59003173 T 19900113; JP 605890 A 19900112