

Title (en)

Device for the vacuum heat treatment of metallic articles

Title (de)

Vorrichtung zur Wärmebehandlung metallischer Werkstücke unter Vakuum

Title (fr)

Dispositif pour le traitement thermique d'articles métalliques sous vide

Publication

EP 0735149 B1 19991222 (DE)

Application

EP 96101733 A 19960207

Priority

DE 29505496 U 19950331

Abstract (en)

[origin: US5722825A] A device for heat-treating metallic workpieces in a vacuum has a revolving vacuum furnace with an inlet transfer lock for introducing a batch of workpieces into the revolving vacuum furnace and with an outlet transfer lock for removing the batch of workpieces from the revolving vacuum furnace. The revolving vacuum furnace has also an annular turntable for transporting the batch of workpieces from the inlet transfer lock to the outlet transfer lock. At least one carburization furnace, for carburization treatment of the batch of workpieces, is connected to the revolving vacuum furnace at least at a peripheral location of the revolving vacuum furnace between the inlet transfer lock and the outlet transfer lock in the direction of transportation of the batch of workpieces. The annular turntable transports the batch of workpieces to the at least one carburization furnace.

IPC 1-7

C21D 9/00; **C21D 1/773**

IPC 8 full level

C21D 1/00 (2006.01); **C21D 1/18** (2006.01); **C21D 1/773** (2006.01); **C21D 9/00** (2006.01); **F27B 9/02** (2006.01); **F27B 9/04** (2006.01); **F27B 9/16** (2006.01); **F27D 3/00** (2006.01); **F27D 3/04** (2006.01); **F27D 99/00** (2010.01)

CPC (source: EP US)

C21D 1/773 (2013.01 - EP US); **C21D 9/0037** (2013.01 - EP US); **F27B 9/16** (2013.01 - EP US); **F27D 3/04** (2013.01 - EP US); **F27D 2003/0059** (2013.01 - EP US); **F27D 2099/008** (2013.01 - EP US)

Cited by

RU2687385C2; EP0811697A3; KR100964994B1; EP2717008A3; CN111424154A; US10626490B2; WO03081156A1; WO2014170022A1; EP3054019A1

Designated contracting state (EPC)

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DOCDB simple family (publication)

US 5722825 A 19980303; AT E187985 T1 20000115; CA 2173058 A1 19961001; DE 29505496 U1 19950601; DE 59603946 D1 20000127; EP 0735149 A1 19961002; EP 0735149 B1 19991222; ES 2141401 T3 20000316; JP H08285462 A 19961101

DOCDB simple family (application)

US 62496596 A 19960329; AT 96101733 T 19960207; CA 2173058 A 19960329; DE 29505496 U 19950331; DE 59603946 T 19960207; EP 96101733 A 19960207; ES 96101733 T 19960207; JP 8595596 A 19960315