

Title (en)

INDUSTRIAL FURNACE, IN PARTICULAR A CHAMBER-TYPE FURNACE FOR THE HEAT TREATMENT OF METALLIC OBJECTS

Publication

EP 0357898 A3 19910109 (DE)

Application

EP 89111844 A 19890629

Priority

DE 8811406 U 19880909

Abstract (en)

[origin: EP0357898A2] The invention relates to an industrial furnace, in particular a chamber-type furnace, for the heat treatment of metallic objects, with a housing, in which a heating chamber is formed for the respective charges to be treated, with a door which closes a front housing opening of the housing and which can be opened to load and unload the heating chamber, and with a fan arranged laterally on the housing, for convection heating of the charges. In order to develop the known industrial furnace, in particular a chamber-type furnace for the treatment of metallic objects, in such a manner that fully automatic operation is possible with it, it is proposed according to the invention that the door be arranged on a vertical displacement device and that, for loading and unloading the heating chamber, a charging device be arranged in a stationary manner immediately in front of the front housing opening. <IMAGE>

IPC 1-7

F27B 17/00; **F27D 1/18**; **F27D 3/00**; **F27D 7/04**

IPC 8 full level

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Citation (search report)

- [A] FR 1215145 A 19600414 - LE MATERIEL THERMIQUE MODERNE
- [AD] DE 8617997 U1 19860814
- [AD] DE 2128158 C
- [Y] METAL SCIENCE & HEAT TREATM., Band 21, Nr. 1/2, 1. Februar 1979, Seiten 52-56; E.N. MARMER et al.: "Vacuum electric furnaces for heat treatment"
- [Y] VDI-Z, Band 122, Nr. 22, November 1980, Seiten 1021-1028; K. BLESS: "Neue Entwicklungen bei der Wärmebehandlung im Vakuum"
- [A] PATENT ABSTRACTS OF JAPAN, Band 10, Nr. 139 (C-348)[2196], 22. Mai 1986; & JP-A-61 000 518 (ISHIKAWAJIMA HARIMA JUKOGYO) 06-01-1986

Cited by

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