

Title (en)
SINGLE-CHAMBER HIGH PRESSURE GAS QUENCH (HPGQ) FURNACE FOR HEAT TREATMENT OF LONG PIECES

Title (de)
EINZELKAMMEROFEN ZUM HOCHDRUCKGASQUENCHEN (HPGQ) ZUR WÄRMEBEHANDLUNG VON LANGEN WERKSTÜCKEN

Title (fr)
FOUR DE TREMPÉ À GAZ HAUTE PRESSION (HPGQ) À CHAMBRE UNIQUE POUR LE TRAITEMENT THERMIQUE DE PIÈCES LONGUES

Publication
EP 3505856 A1 20190703 (EN)

Application
EP 17002085 A 20171227

Priority
EP 17002085 A 20171227

Abstract (en)
A single-chamber HPGQ vacuum furnace is equipped with a load cooling nozzle system which is divided into two subsystems. The first of which is installed on the side walls of the heating chamber (2), with the nozzle system directed towards the load (21), while the second one is built into the insulating wall of the hearth (3), executed in the form of collectors (24) placed in a circular arrangement in relation to each workpiece (21) situated vertically on hearth supports (3). Each of the collectors (24) has a row of blowing nozzles (30) arranged at the height of the workpiece (21) and directed at an angle between 75° and 105° towards the workpiece surface.

IPC 8 full level
C21D 1/613 (2006.01); **C21D 1/773** (2006.01); **F27B 5/04** (2006.01); **F27B 5/06** (2006.01); **F27B 5/16** (2006.01); **F27D 9/00** (2006.01)

CPC (source: EP)
C21D 1/613 (2013.01); **C21D 1/773** (2013.01); **C21D 9/0068** (2013.01); **C21D 9/28** (2013.01); **F27B 5/04** (2013.01); **F27B 5/16** (2013.01); **F27D 9/00** (2013.01); **F27B 2005/064** (2013.01); **F27D 2009/0075** (2013.01)

Citation (search report)
• [Y] US 4906182 A 19900306 - MOLLER CRAIG A [US]
• [Y] US 7427375 B1 20080923 - CUSHMAN FLOYD [US]
• [A] US 4854860 A 19890808 - HEMSATH KLAUS H [US]

Cited by
CN113899200A

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BA ME

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