

Title (en)

Heat treatment apparatus and procedure for operating said apparatus

Title (de)

Wärmebehandlungsanlage und Verfahren zum Betreiben einer solchen Anlage

Title (fr)

Dispositif de traitement thermique et procédé pour actionner ledit dispositif

Publication

EP 1367139 A3 20041229 (DE)

Application

EP 03012016 A 20030528

Priority

DE 10224129 A 20020529

Abstract (en)

[origin: EP1367139A2] Heat treatment device comprises: a working chamber (2) arranged in a steel housing (1); units for heating and cooling the chamber; and units for circulating the gas in the chamber and/or steel housing. The chamber has an inlet (3) for a liquefied gas line terminating in a vaporizing element having nozzle outlets (5). The chamber has an outlet (6) for the passage of waste gas. An Independent claim is also included for a process for operating a heat treatment device.

IPC 1-7

C21D 1/767; **C21D 1/76**; **C21D 1/74**; **C21D 1/613**; **F27B 17/00**

IPC 8 full level

C21D 1/613 (2006.01); **C21D 1/74** (2006.01); **C21D 1/76** (2006.01); **C21D 1/767** (2006.01)

CPC (source: EP)

C21D 1/613 (2013.01); **C21D 1/74** (2013.01); **C21D 1/76** (2013.01); **C21D 1/767** (2013.01)

Citation (search report)

- [Y] US 4963091 A 19901016 - HOETZL MAX [US], et al
- [Y] DE 3127606 A1 19830127 - KOERTVELYESSY LASZLO VON DIPL
- [A] PATENT ABSTRACTS OF JAPAN vol. 0101, no. 56 (C - 351) 5 June 1986 (1986-06-05)

Cited by

WO2005108629A1; FR2869046A1; EP2505676A1; US2012247627A1; US9617611B2; WO2008155426A1; EP2505676B1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)

EP 1367139 A2 20031203; **EP 1367139 A3 20041229**; DE 10224129 A1 20031218; DE 10224129 B4 20061102; DE 10224129 B8 20070215

DOCDB simple family (application)

EP 03012016 A 20030528; DE 10224129 A 20020529