

Title (en)
Rotating oven

Title (de)
Drehofen

Title (fr)
Four rotatif

Publication
EP 2085728 A1 20090805 (DE)

Application
EP 09000693 A 20090120

Priority
DE 102008006682 A 20080130

Abstract (en)

The rotating furnace comprises a heating chamber (19), in which a filling opening (20) is formed for bringing the objects (P) to be heated into the heating chamber, and a rotationally driven, circulating device (22) for transporting the objects through the heating chamber to an outlet, at which the objects are removed from the heating chamber. The heating chamber comprises side panels (16, 17), a base (18) and a cover (23). A section of the cover is formed as rotationally driven circular lid, which carries a holder for receiving the objects on its lower surface turned to the heating chamber. The rotating furnace comprises a heating chamber (19), in which a filling opening (20) is formed for bringing the objects (P) to be heated into the heating chamber, and a rotationally driven, circulating device (22) for transporting the objects through the heating chamber to an outlet, at which the objects are removed from the heating chamber. The heating chamber comprises side panels (16, 17), a base (18) and a cover (23). A section of the cover is formed as rotationally driven circular lid, which carries a holder for receiving the objects on its lower surface turned to the heating chamber. The filling opening and/or the outlet are formed as slots in the base of the heating chamber. The slots run perpendicular to the direction of motion of the objects in the heating chamber. A base central strut is surrounded by the heating chamber. The filling opening and the outlet are arranged next to each other in a circumferential direction of the heating chamber around an angle of 20-50[deg]. The cover is rotatably inserted into a circular recess. A rotary drive for the lid is arranged in the central struts. An articulated arm robot (R) is intended for placing the objects on the holder or for removing from the holder. The heating chamber stands on supports and a free space is formed below the base.

Abstract (de)

Ein Drehofen besitzt eine Heizkammer, in der eine Beschickungsöffnung ausgebildet ist, durch die zu erwärmende Objekte in die Heizkammer eingebracht werden. Mittels einer drehangetriebenen, umlaufenden Transportvorrichtung werden die Objekte durch die Heizkammer bis zu einer Entnahmöffnung transportiert und an dieser aus der Heizkammer entnommen. Die Heizkammer weist eine oder mehrere Seitenwände, einen Boden und eine Decke auf. Dabei ist vorgesehen, dass zumindest ein Abschnitt der Decke als drehangetriebener Deckel ausgebildet ist, der auf seiner der Heizkammer zugewandten Unterseite mehrere Halter zur Aufnahme der Objekte trägt, und dass die Beschickungsöffnung und/oder die Entnahmöffnung in dem Boden der Heizkammer ausgebildet sind.

IPC 8 full level
F27B 9/16 (2006.01); **C21D 9/00** (2006.01); **F27B 9/38** (2006.01); **F27B 9/39** (2006.01)

CPC (source: EP)
C21D 9/0037 (2013.01); **F27B 9/16** (2013.01); **F27B 9/38** (2013.01); **F27B 9/39** (2013.01)

Citation (applicant)
JP 2003212577 A 20030730 - SHOWA MFG

Citation (search report)

- [A] WO 2005050112 A2 20050602 - LOI THERM PROCESS GMBH [DE], et al
- [A] JP 2003212577 A 20030730 - SHOWA MFG
- [A] WO 2004009855 A1 20040129 - CONS ENG CO INC [US]
- [A] DATABASE WPI Week 199523, Derwent World Patents Index; AN 1995-177011, XP002524785

Cited by
DE102014004398A1; WO2014063807A1

Designated contracting state (EPC)
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