

Title (en)
Heating device

Title (de)
Heizgerät

Title (fr)
Dispositif de chauffage

Publication
EP 1562006 B1 20070801 (DE)

Application
EP 04029792 A 20041216

Priority
DE 102004005048 A 20040130

Abstract (en)
[origin: EP1562006A1] Heating device comprises a helical heat exchanger (1), a cylindrical combustion chamber (2) axially defined by a front and a rear cover element (3, 4) and radially defined by the heat exchanger, a burner (5) arranged on one of the two cover elements, and a housing (6) consisting of a jacket part (7) and the cover elements and surrounding the heat exchanger with the formation of an exhaust gas channel (8). The heat exchanger has axially oriented connecting sleeves (11, 12) at its two ends (9, 10). Openings (13, 14) provided in the cover elements receive the connecting sleeves. Preferred Features: The jacket part is made of plastic and at least one of the two cover elements is made preferably of diecast aluminum.

IPC 8 full level
F24H 1/43 (2006.01); **F24H 9/02** (2006.01); **F24H 9/14** (2006.01); **F28D 7/02** (2006.01)

CPC (source: EP)
F24H 1/43 (2013.01); **F24H 9/02** (2013.01); **F24H 9/14** (2013.01); **F24H 9/146** (2013.01); **F28D 7/024** (2013.01)

Cited by
DE102010049141A1; DE102010049143A1; JP2012519823A; EP2306112A1; DE102009043288A1; DE102011010444A1; DE102018116980A1; DE102008016313A1; EP2784408A1; DE102013103191A1; FR2942866A1; DE102009043289B3; EP2306113A3; US2010044011A1; DE102009048207B3; RU2476799C2; CN107044786A; DE102014107844B3; IT202200003476A1; EP3141839A1; EP3141840A1; ITUB20153485A1; ITUB20153465A1; DE202012101619U1; EP2306113A2; DE102012101268A1; DE202009018069U1; DE202011002667U1; WO2010100004A1; DE102008008734A1; EP2090858A1; US8978638B2; US9816726B2; DE202010017862U1; DE202016100078U1; DE202010017861U1; KR101532023B1; EP2105679A2; DE202014010537U1; DE102018116980B4

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
EP 1562006 A1 20050810; **EP 1562006 B1 20070801**; AT E368833 T1 20070815; DE 102004005048 A1 20050901; DE 502004004502 D1 20070913; DK 1562006 T3 20071126; ES 2291803 T3 20080301; PL 1562006 T3 20071231; SI 1562006 T1 20071231

DOCDB simple family (application)
EP 04029792 A 20041216; AT 04029792 T 20041216; DE 102004005048 A 20040130; DE 502004004502 T 20041216; DK 04029792 T 20041216; ES 04029792 T 20041216; PL 04029792 T 20041216; SI 200430484 T 20041216