

Title (en)
SHAPED BURNER PIECE WITH INTERNAL FLUE GAS RECIRCULATION

Title (de)
BRENNERFORMSTÜCK MIT INTERNER RAUCHGASRÜCKFÜHRUNG

Title (fr)
PIÈCE DE BRÛLEUR FAÇONNÉE AVEC RECIRCULATION INTERNE DES GAZ DE COMBUSTION

Publication
EP 4019836 B1 20231011 (EN)

Application
EP 21214919 A 20211215

Priority
CZ 2020713 A 20201222

Abstract (en)
[origin: EP4019836A1] Burner shape piece (1) which comprises an inlet gas-air diffuser (2) and in front of it at an axial distance an outlet gas-air-flue diffuser (3) is arranged, wherein the diffusers (2, 3) are connected together by four regularly spaced ribs (8) arranged around the inner circumference of the burner shaped piece (1) and the gas-air diffuser (2) has a hollow conical taper (4) terminated by a cylindrical flow-direction regulator (6), wherein the gas-air-flue diffuser (3) has a hollow conical taper (5) terminated by a cylindrical flow-direction regulator (7), wherein the gas-air-flue diffuser (3) has a larger diameter as at the beginning and so at the end of its taper (5) than the diameter at the beginning and at the end of the taper (4) of the gas-air diffuser (2), and in the spaces between the outer surface of the gas-air diffuser (2) and the inner face (13) of the gas-air-flue diffuser (3) and the inner surface of the taper (5), four evenly spaced flue gas channels (11) are formed around the peripheral shell of the burner shaped piece (1) with the inlets for fuel gas (B) and on the outer circumference of the burner shaped piece (1) groove-shaped channels (9) are formed along its entire length and are recessed into each rib (8).

IPC 8 full level
F23M 5/02 (2006.01); **F23C 6/04** (2006.01); **F23C 9/00** (2006.01); **F23D 14/02** (2006.01); **F23D 14/62** (2006.01)

CPC (source: CZ EP)
F23C 6/047 (2013.01 - EP); **F23C 9/00** (2013.01 - EP); **F23D 11/40** (2013.01 - CZ); **F23D 14/02** (2013.01 - EP); **F23D 14/62** (2013.01 - EP); **F23M 5/025** (2013.01 - EP); **F23C 2201/20** (2013.01 - EP); **F23C 2201/30** (2013.01 - EP); **F23C 2202/10** (2013.01 - EP); **F23C 2900/09002** (2013.01 - EP); **F23D 2203/007** (2013.01 - EP)

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
EP 4019836 A1 20220629; **EP 4019836 B1 20231011**; **EP 4019836 C0 20231011**; CZ 2020713 A3 20211027; CZ 308978 B6 20211027

DOCDB simple family (application)
EP 21214919 A 20211215; CZ 2020713 A 20201222