

Title (en)
Burner Having Multiple Burning Rings

Title (de)
Brenner mit mehreren Brennringe

Title (fr)
Brûleur avec anneaux multiples de combustion

Publication
EP 2868968 A1 20150506 (EN)

Application
EP 14164324 A 20140411

Priority
TR 201312711 A 20131104

Abstract (en)
The invention relates to a new multiple gas burner which is used in domestic cookers and ovens (i.e. furnaces), which consists of a flame crown designed such that the inner and outer flame ports will be integrated and inner flame ports will be designed in small burner size standard, and in which housings for securing (i.e. stabilizing) the thermocouple and sparking plug are provided. In the multiple gas burner according to the invention, the flame crown is designed as one piece, i.e. in an integrated manner, thereby minimizing the risk of small separations (i.e. disintegration) likely to occur between the ports, and of the port parts not fitting in one another. Further, in said multiple gas burner, housings for positioning of the thermocouple, which provides continuous burning, and of the sparking plug, which provides ignition with a spark, both of said parts being disposed in the burner, in order to achieve flame holding in the part called pool, are provided. These housings enable the sparking plug and thermocouple to be located closer to the inner ring ports, while the bearings comprising the housings allow the internal separator to properly fit in the pool. Therefore, the first ignition in the flame crown is easily performed in inner ring ports, while the burning in the other rings occurs inside-out by means of flame switch method. Said internal separator provided in the gas burner according to the invention separates the primary air and primary air-gas mixture and is mounted in the integrated, i.e. one-piece, flame crown according to the invention by means of screws; on the other hand, the protrusion located around the horizontal venturi seals the gas reaching to the pool. Again, in the present multiple gas burner, secondary air holes are provided for sending the desired amount of air to the ports; wherein the flame in the ports is made to burn in a stronger manner with the air supply through these holes.

IPC 8 full level
F23D 14/06 (2006.01)

CPC (source: EP)
F23D 14/06 (2013.01); **F23D 2900/14062** (2013.01)

Citation (applicant)
• TR 200901741 A2 20090821 - TURAS GAZ ARMATUERLERI SANAYI [TR]
• TR 201205072 A2 20121221 - TURAS GAZ ARMATUERLERI SAN VE TIC A S [TR]
• WO 2007000059 A1 20070104 - LITEBOOK COMPANY LTD [CA], et al
• WO 2012035404 A1 20120322 - SABAF SPA [IT], et al

Citation (search report)
• [Y] WO 2012077050 A2 20120614 - SER DAYANIKLI TUKETIM MALLARI IC VE DIS TICARET SANAYI LTD SIRKETI [TR], et al
• [Y] US 2009159071 A1 20090625 - CADIMA PAUL BRYAN [US], et al
• [A] US 6132205 A 20001017 - HARNEIT UWE [US]

Cited by
CN105444170A; WO2017101545A1

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

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 2868968 A1 20150506

DOCDB simple family (application)
EP 14164324 A 20140411