

Title (en)
PREMIX GAS BURNER

Title (de)
VORGEMISCHGASBRENNER

Title (fr)
BRÛLEUR À GAZ DE PRÉMÉLANGE

Publication
EP 3781866 A1 20210224 (EN)

Application
EP 19714670 A 20190403

Priority
• EP 18168254 A 20180419
• EP 2019058362 W 20190403

Abstract (en)
[origin: WO2019201600A1] The premix gas burner comprises a metal mounting plate (102), a mixing chamber (108) and a porous burner deck (110). The porous burner deck encloses the mixing chamber. Combustion is stabilized on the porous burner deck after premix gas has flown from the mixing chamber through the porous burner deck. The burner also comprises a plate structure (106) comprising a plurality of perforations (112). The plate structure is provided in the mixing chamber for flow of premix gas through the perforations of the plate structure before the premix gas flows through the porous burner deck. The circumference of the porous burner deck has the shape of a rectangle of which the two short sides have been rounded. The plate structure has along its length an elongated section (131) and two end caps (133). Each of the end caps is provided at an end of the elongated section. The plate structure is provided via cutting and folding of a metal plate into the convex shape of the plate structure. The elongated section of the plate structure comprises at least one groove (135) created by deep drawing. The at least one groove is provided on the crest line of the plate structure. The at least one groove is convex in the same direction as the plate structure. In each of the two end caps two edges (137) of the metal plate join parallel to the length direction of the elongated section in order to form the end caps.

IPC 8 full level
F23D 14/02 (2006.01); **F23D 14/14** (2006.01)

CPC (source: EP)
F23D 14/02 (2013.01); **F23D 14/145** (2013.01); **F23D 2203/1017** (2013.01); **F23D 2212/201** (2013.01); **F23D 2213/00** (2013.01); **F23D 2900/00003** (2013.01); **F23D 2900/00012** (2013.01); **F23D 2900/00019** (2013.01)

Citation (search report)
See references of WO 2019201600A1

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)
WO 2019201600 A1 20191024; CN 112567176 A 20210326; CN 112567176 B 20230307; EP 3781866 A1 20210224; EP 3781866 B1 20220504

DOCDB simple family (application)
EP 2019058362 W 20190403; CN 201980036291 A 20190403; EP 19714670 A 20190403