

Title (en)  
PREMIX GAS BURNER

Title (de)  
VORGEMISCHGASBRENNER

Title (fr)  
BRÛLEUR À GAZ DE PRÉMÉLANGE

Publication  
**EP 3781865 A1 20210224 (EN)**

Application  
**EP 19714669 A 20190403**

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Abstract (en)  
[origin: WO2019201599A1] A premix gas burner comprises a metal mounting plate (102), a burner deck, a metal plate structure (106), and a gas mixing chamber (108). The metal mounting plate comprises a plain section (107) for mounting the burner in a heating appliance. The burner deck comprises a woven wire mesh (110) onto which the flames are stabilized when the burner is in use. At least part of the metal plate structure is perforated for the premix gas to flow from the gas mixing chamber through the perforations (112) of the metal plate structure before the premix gas flows through the woven wire mesh. The metal mounting plate has an opening (111). The woven wire mesh is inserted from the gas mixing chamber through the opening of the metal mounting plate. The metal plate structure is inserted from the gas mixing chamber through the opening of the metal mounting plate. The woven wire mesh is bent such that a flange (122) is provided along at least part of the circumference of the woven wire mesh. The flange of the woven wire mesh is along the circumference of the porous burner deck split in a plurality of flange segments. The opening of the metal mounting plate comprises two parallel linear sides. The metal mounting plate comprises a plurality of lips (116) at its inner circumference around the opening. The lips are folded over and grab into notches, slots or openings in the metal plate structure thereby clamping the metal plate structure firmly onto the metal mounting plate. The metal mounting plate comprises upstanding ridges (126) providing supporting elements onto which the metal plate structure is clamped by the lips of the metal mounting plate. The upstanding ridges of the metal mounting plate fit into openings between segments of the flange of the woven wire mesh, such that the flange is held between the metal mounting plate and the metal plate structure with play of the flange relative to the metal mounting plate and relative to the metal plate structure.

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