

Title (en)

BURNER FOR REDUCING NOX EMISSIONS AND METHOD FOR OPERATING THE BURNER

Title (de)

BRENNER ZUM REDUZIEREN VON NOX-EMISSIONEN UND VERFAHREN ZUM BETREIBEN DES BRENNERS

Title (fr)

BRÛLEUR POUR RÉDUIRE LES ÉMISSIONS DE NOX ET PROCÉDÉ PERMETTANT DE FAIRE FONCTIONNER LE BRÛLEUR

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Application

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Abstract (en)

[origin: WO2020253970A1] The invention relates to a burner (10; 11; 12) for heating a heating space (55; 55'), with reduction of NOx emissions. The burner (10; 11; 12) comprises a mixing and combustion chamber (54; 54'), a mixing and igniting device (51) which is arranged in the mixing and combustion chamber (54; 54'), and a fuel supply (50) which is connected to the mixing and igniting device (51) and is designed to supply fuel to the mixing and igniting device (51). Furthermore, an air supply (30, 30') is provided, which is designed to supply at least one partial air flow (L1) to the mixing and combustion chamber (54; 54'). A combustion chamber opening (53; 53') opens the mixing and combustion chamber (54; 54') toward a heating space (55; 55') to be heated. In addition, control means (60) are designed to control a fuel flow (B) via the fuel supply (50) and to control at least one partial air flow (L1) via the air supply (30; 30'), the burner (10; 11; 12) and the control means (60) being designed for operation of the burner (10; 11; 12) with a stable flame (56; 56') which extends from the mixing and igniting device (51) into the heating space (55; 55') through the combustion chamber opening (53; 53'). The cross-sectional area of the combustion chamber opening (53; 53'), which area is relative to the burner power, lies in the range between 1.5 mm²/kW and 10 mm²/kW.

IPC 8 full level

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