

Title (en)

Method for the combustion of fuel gas with free oxygen containing gas and burner for it.

Title (de)

Verfahren zum Verbrennen von Brenngas mit Sauerstoffgas sowie zugehöriger Brenner.

Title (fr)

Procédé et brûleur pour la combustion de gaz combustible avec gaz oxygéné.

Publication

EP 0468155 B1 19950719 (DE)

Application

EP 91107864 A 19910515

Priority

DE 4016180 A 19900519

Abstract (en)

[origin: EP0468155A1] The invention relates to a method for the combustion of fuel gas with free oxygen-containing gas, in particular with low-pressure fuel gas supply (< 100 mbar) and using the Coanda effect. i.e. that low- pressure fuel gas is supplied to a suction/mixing pipe over the entire cross-section except for an annular gap adjacent to the wall of the suction/mixing pipe, while at the same time free oxygen-containing gas at higher pressure is fed in via the annular gap and thus an additional suction of fuel gas arises. In order to improve such a low-pressure combustion method, to design it efficiently, reliably and easily regulably, it is proposed that only a primary part of the free oxygen-containing gas necessary for the combustion is supplied via the Coanda annular gap (5[216C]) inside the suction/mixing pipe (2), while a secondary part is only supplied to the gas mixture leaving the suction/mixing pipe, the values for - pressure and quantity of the primary free oxygen-containing gas - pressure and quantity of the secondary free oxygen-containing gas being adjusted as a function of the available fuel gas pressure, the desired adjustment of the combustion and the combustion efficiency and the purpose of application and characteristic data relating to safety regulations.

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