

Title (en)

METHOD FOR ADJUSTING THE EXCESS AIR COEFFICIENT ON A FIRING APPARATUS, AND FIRING APPARATUS

Title (de)

VERFAHREN ZUR EINSTELLUNG DER LUFTZAHL AN EINER FEUERUNGSEINRICHTUNG UND FEUERUNGSEINRICHTUNG

Title (fr)

PROCEDE DE REGLAGE DU COEFFICIENT D'AIR DANS UN APPAREIL DE COMBUSTION ET APPAREIL DE COMBUSTION

Publication

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Application

**EP 05766826 A 20050620**

Priority

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Abstract (en)

[origin: WO2006000367A1] The temperature generated by a firing apparatus, particularly a gas burner, depends on the mixing ratio between the quantity of air and the quantity of gas fed to the firing apparatus, characterized by the excess air coefficient  $\lambda$ , at a predefined burner load (air mass flow rate) in such a way that the temperature generated by the firing apparatus reaches a maximum when  $\lambda=1$ . According to the inventive method for adjusting the excess air coefficient, said maximum temperature  $T_{\text{max}}$  is determined, whereupon the desired setpoint value  $\lambda_{\text{hy}}$  of the excess air coefficient is adjusted and the associated setpoint temperature  $T_{\text{soll}}$  is measured. A characteristic curve which represents the correlation between the respective air mass flow rates and the setpoint temperatures at the setpoint value  $\lambda_{\text{hy}}$  of the excess air coefficient and allows combustion to be regulated to an optimal hygienic state can be determined from said determined correlation between the setpoint temperatures  $T_{\text{soll}}$  at different predefined burner loads. The inventive firing apparatus is adapted to carry out said method and especially comprises a mass flow sensor in the air delivery zone as well as a temperature sensor in the effective range of the burner flame.

IPC 8 full level

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CPC (source: EP KR US)

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