

Title (en)  
SYSTEM FOR OPTIMIZING COMBUSTION PROCESSES BY MEANS OF DIRECT MEASURES INSIDE THE HEARTH

Title (de)  
SYSTEM ZUR OPTIMIERUNG VON VERBRENNUNGSPROZESSEN MITTELS DIREKTER MASSE IM INNEREN DES OFENS

Title (fr)  
SYSTEME PERMETTANT D'OPTIMISER DES PROCEDES DE COMBUSTION AU MOYEN DE MESURES DIRECTES PRISES A L'INTERIEUR DU FOYER

Publication  
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Application  
**EP 01903810 A 20010215**

Priority  
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Abstract (en)  
At least one probe (1) is introduced via one of a number of openings (2) in the fins (4) between the water-carrying tubes (5) in the furnace wall. A system for carrying out measurements in the high temperature regions inside furnaces (3) for industrial boilers, e.g. for central heating systems, by gas extraction or introducing sensors, as well as for the controlled optimization of the combustion process as a function of the measured data, comprises a number of small openings in the furnace and at least one probe with a small cross-section for introducing into the furnace via these openings. Each opening is located in a fin joining two water-carrying tubes in the furnace wall, the opening width being less than that of the fin, typically less than 20 mm. Data can be obtained regarding gas concentration, temperature, heat flow and images at different wavelengths.

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