

Title (en)  
POWER STATION FURNACE SYSTEM

Title (de)  
KRAFTWERKSFEUERUNGSANLAGE

Title (fr)  
INSTALLATION DE COMBUSTION D'UNE CENTRALE

Publication  
**EP 3695167 B1 20210901 (DE)**

Application  
**EP 18796827 A 20181005**

Priority  
• DE 102017009393 A 20171011  
• DE 2018000286 W 20181005

Abstract (en)  
[origin: WO2019072329A1] The invention relates to a device for controlling the combustion process in a power station furnace system, comprising burners (1) arranged in a wall of a combustion chamber, in which the combustion air is supplied via an annular gap (3) surrounding the burner (1) and the burner (1) comprises means for influencing the quantity of combustion air flowing through the annular gap (3), said device comprising means for recording the quantity of fuel supplied to a burner (1), and means for determining the quantity of combustion air flowing through the annular gap (3). The means for determining the quantity of combustion air flowing through the annular gap (3) comprise two sensor rods (11, 12), forming a pair of rods corresponding with each other, which are arranged in the annular gap (3.1), successively and in parallel, preferably transversely to the longitudinal axis (4) of the annular gap and in the flow direction (7) of the combustion air flow, the sensor rods (11, 12) being arranged such that at least part of the combustion air flowing past the first sensor rod (12) in the flow direction (7) of the combustion air flow also flows past the second sensor rod (11) in the flow direction (7) of the combustion air flow. The sensor rods (11, 12) are electrically connected to a correlation measurement device (13), by means of which the speed of the combustion air flow is determined by evaluating the electrical signals generated by electric induction, and the quantity of combustion air flowing through the annular gap (3.1) is determined on the basis of the cross-sectional surface of the annular gap (3.1). The combustion process is controlled accordingly by modifying the quantity of combustion air.

IPC 8 full level  
**F23N 1/02** (2006.01); **F23N 5/18** (2006.01)

CPC (source: EP KR US)  
**F23C 7/004** (2013.01 - US); **F23D 1/00** (2013.01 - EP US); **F23N 1/022** (2013.01 - EP KR US); **F23N 3/002** (2013.01 - EP KR); **F23N 5/184** (2013.01 - EP KR); **F23N 2223/10** (2020.01 - EP KR US)

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)  
**DE 102017009393 B3 20190124**; CN 111201401 A 20200526; CN 111201401 B 20220712; EP 3695167 A1 20200819; EP 3695167 B1 20210901; ES 2898242 T3 20220304; JP 2020537109 A 20201217; KR 20200065049 A 20200608; PL 3695167 T3 20220214; US 2020292170 A1 20200917; WO 2019072329 A1 20190418

DOCDB simple family (application)  
**DE 102017009393 A 20171011**; CN 201880066187 A 20181005; DE 2018000286 W 20181005; EP 18796827 A 20181005; ES 18796827 T 20181005; JP 2020520629 A 20181005; KR 20207013321 A 20181005; PL 18796827 T 20181005; US 201816649047 A 20181005