

Title (en)  
DEVICE FOR CONTROLLING THE COMBUSTION MIXTURE OF A BURNER

Publication  
**EP 0030736 A3 19810930 (DE)**

Application  
**EP 80107932 A 19801216**

Priority  
DE 2950689 A 19791217

Abstract (en)  
[origin: US4396369A] A furnace air volume control apparatus for controlling the volume of furnace air to achieve efficient burning is disclosed. The apparatus includes regulating valves positioned within supply air inlets and exhaust gas outlets of the furnace. A measured data receiver positioned on the exhaust gas side transmits a measuring signal to a control unit connected to the regulating valves. The control unit includes a storage unit for storing valve positions assigned to respective burner loads. By monitoring various exhaust gas parameters with the measured data receiver and control unit valve position, adjustment in response to changes in the burner load is possible by comparing a previously stored valve position recalled from the storage unit with a characteristic curve. The valve adjusting value stored in the storage unit is essentially congruent with the change in burner load. After exhaust gas stabilization has occurred in response to different burner loads precise correction of the valve position value occurs.

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Citation (search report)  

- [XE] GB 2021815 A 19791205 - LAND PYROMETERS LTD
- US 3985294 A 19761012 - GUIDO PAUL VINCENT, et al
- US 3960320 A 19760601 - SLATER BILLY RAY
- IBM TECHNICAL DISCLOSURE BULLETIN, Band 18, Nr. 2, Juli 1975, Seiten 428-429 New York, U.S.A. L. GULITZ et al.: "Computerized control system for improved combustion efficiency"
- ISA TRANSACTIONS, Band 9, Nr. 4, 1970, Seiten 261-269 New York, U.S.A. A.E. TURNER: "New horizons for analog control"

Cited by  
EP0088717A1; EP0384280A3; EP0083479A1; AT386887B; EP0697564A1; EP0088975A3; FR2515314A1; EP0088513A1; FR2874419A1; EP0146690A1; EP0173770A1; WO9621127A1

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