Title (en)

EXCESS AIR CONTROL FOR CRACKER FURNACE BURNERS

Title (de)

LUFTAUSTRITTSSTEUERUNG FÜR CRACKER-OFEN-BRENNER

Title (fr)

COMMANDE D'EXCEDANT D'AIR DE BRULEURS DE FOUR DE CRAQUEUR

Publication

EP 1889035 A2 20080220 (EN)

Application

EP 06770146 A 20060509

Priority

- US 2006017977 W 20060509
- US 68154905 P 20050516

Abstract (en)

[origin: WO2006124422A2] A method for control of the air/fuel ratio of the burner(s) (excess air) of a thermal cracker which includes three steps. The first step is to direct a wavelength modulated beam of near infrared light from a tunable diode laser through combustion gas from the burner to a near infrared light detector to generate a detector signal. The second step is to analyze the detector signal for spectroscopic absorption at wavelengths characteristic for an analyte selected from the group consisting of oxygen, carbon monoxide and nitrogen oxide to determine the concentration of the analyte in the combustion gas. The third step is to adjust the air/fuel ratio of the burner(s) (excess air) in response to the concentration of the analyte of the second step.

IPC 8 full level

G01N 21/35 (2006.01); **C10G 9/20** (2006.01); **F27B 3/28** (2006.01)

CPC (source: EP US)

C10G 9/206 (2013.01 - EP US); **F27D 19/00** (2013.01 - EP US); **F27D 21/00** (2013.01 - EP US); **F27D 99/0033** (2013.01 - EP US); **G01N 21/39** (2013.01 - EP US)

Citation (search report)

See references of WO 2006124422A2

Citation (examination)

US 5443040 A 19950822 - KAJI HITOSHI [JP], et al

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2006124422 A2 20061123; **WO 2006124422 A3 20070104**; CN 101175988 A 20080507; CN 101175988 B 20100825; EP 1889035 A2 20080220; JP 2008540804 A 20081120; JP 5142986 B2 20130213; US 2011062056 A1 20110317

DOCDB simple family (application)

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