



(19)

Europäisches Patentamt

European Patent Office

Office européen des brevets



(11)

EP 0 668 471 A3

(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3:
11.06.1997 Bulletin 1997/24

(51) Int. Cl.⁶: **F23C 11/00**, F23C 9/00,
F01N 3/26, F01N 3/28

(43) Date of publication A2:
23.08.1995 Bulletin 1995/34

(21) Application number: **94115017.9**

(22) Date of filing: **23.09.1994**

(84) Designated Contracting States:
DE FR GB IT SE

(30) Priority: **17.02.1994 US 197890**
17.02.1994 US 197931

(71) Applicant: **PFEFFERLE, William C.**
Middletown, NJ 07748 (US)

(72) Inventor: **PFEFFERLE, William C.**
Middletown, NJ 07748 (US)

(74) Representative: **Boeters, Hans Dietrich, Dr. et al**
Patentanwälte Boeters & Bauer,
Bereiteranger 15
81541 München (DE)

(54) Catalytic method

(57) The method of combusting lean fuel-air mixtures comprising the steps of:

a. obtaining a gaseous admixture of fuel and air, said admixture having an adiabatic flame temperature below a temperature which would result in any substantial formation of nitrogen oxides but above about 800° Kelvin;

b. contacting at least a portion of said admixture with a catalytic surface (31) and producing reaction products; and

c. passing said reaction products to a thermal reaction chamber (33), thereby igniting and stabilizing combustion in said thermal reaction chamber.

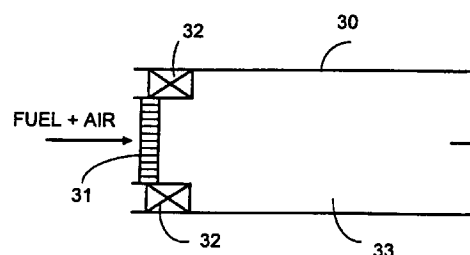


FIG.3

EP 0 668 471 A3



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 94 11 5017

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
X	DE 14 76 475 A (ARONSOHN) 8 May 1969	1,2,10, 11,14,17	F23C11/00
Y	* the whole document *	3-9,12, 13,15,16	F23C9/00
	---		F01N3/26
Y	US 5 051 241 A (PFEFFERLE WILLIAM C) 24 September 1991	3-7,12, 13,15,16	F01N3/28
	* the whole document *		

X	PATENT ABSTRACTS OF JAPAN vol. 018, no. 196 (M-1589), 6 April 1994 & JP 06 002849 A (CENTRAL RES INST OF ELECTRIC POWER IND;OTHERS: 01), 11 January 1994,	1,2	
Y	* abstract *	8,9	

X	PATENT ABSTRACTS OF JAPAN vol. 014, no. 556 (M-1057), 11 December 1990 & JP 02 238206 A (SAKAI CHEM IND CO LTD), 20 September 1990,	1,2,10, 11	
	* abstract *		

X	PATENT ABSTRACTS OF JAPAN vol. 016, no. 169 (M-1239), 23 April 1992 & JP 04 015410 A (CENTRAL RES INST OF ELECTRIC POWER IND;OTHERS: 01), 20 January 1992,	1,2	
	* abstract *		

A	US 3 976 432 A (SCHWARZ FERDINAND ET AL) 24 August 1976	1,10,14, 17	
	* the whole document *		

The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
THE HAGUE		16 April 1997	Coli, E
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

EPO FORM 1503 03.82 (P04C01)