

(19)



Europäisches Patentamt  
European Patent Office  
Office européen des brevets



(11) Publication number:

**0 561 376 A3**

(12)

**EUROPEAN PATENT APPLICATION**(21) Application number: **93104344.2**(51) Int. Cl.<sup>5</sup>: **F23G 7/06**(22) Date of filing: **17.03.93**(30) Priority: **18.03.92 IT TO920229**(43) Date of publication of application:  
**22.09.93 Bulletin 93/38**(84) Designated Contracting States:  
**AT BE DE ES FR GB NL SE**(88) Date of deferred publication of the search report:  
**27.10.93 Bulletin 93/43**

(71) Applicant: **CRIS -CONSORZIO RICERCHE  
INNOVATIVE PER IL SUD**  
**Via Nuova delle Brecce, 260**  
**I-80147 Napoli(IT)**

(72) Inventor: **Demartino, Piermartino**  
**Via Fratelli Bressani, 8**  
**I-20100 Milano(IT)**  
Inventor: **Milani, Ambrogio**  
**Salita Inferiore S. Barnaba, 10**  
**I-16100 Genova(IT)**  
Inventor: **Razore, Sandro**  
**Via Campodonico, 20/a**  
**I-16030 Pieve Ligure(IT)**

(74) Representative: **Boggio, Luigi et al**  
**STUDIO TORTA Società Semplice**  
**Via Viotti, 9**  
**I-10121 Torino (IT)**

(54) **Method and apparatus for burning poor gases.**

(57) The method consists of mixing a flow of poor gas, for example blast furnace gas, with a combustion-support gas constituted by the exhaust gases from a gas turbine, and in burning the mixture with the aid of a pilot flame (19). The combustion apparatus includes a combustion chamber (6) to which the combustion-support gas is supplied in a predetermined direction and sense (C), a linear burner (9) which creates the pilot flame (19) in the same direction, and sense (C) as the combustion-support gas, and two distributor casings (21) for distributing the poor gas into the chamber (6) in a direction (P) transverse that of the combustion-support gas.

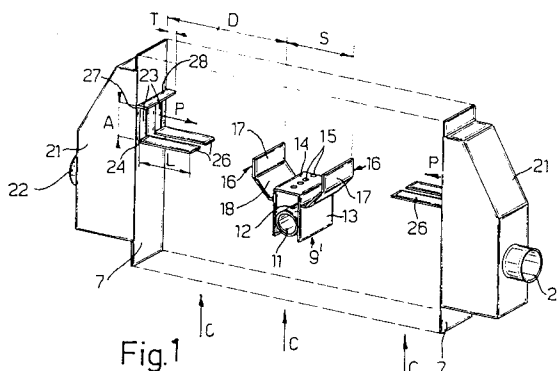


Fig.1

**EP 0 561 376 A3**



European Patent  
Office

## EUROPEAN SEARCH REPORT

Application Number

EP 93 10 4344

Page 1

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.5)
X	US-A-4 154 567 (DAHMEN) * column 2, line 9 - line 54 * * column 3, line 37 - column 4, line 6 * * abstract; figure 1 *	1,2,5	F23G7/06
Y	---	6	
Y	US-A-3 649 211 (VOSPER) * column 2, line 41 - column 4, line 24 * * figures *	6	
X	---	1,5	
X	US-A-3 244 220 (KLOECKER) * column 1, line 41 - column 2, line 24 * * figure 1 *	6	
Y	---	4	
A	---	6	
Y	US-A-3 841 828 (COOPER) * column 4, line 14 - line 61 * * figures 3,4 *	1,5	
X	---	2,4	
A	US-A-2 920 689 (TINKER) * column 2, line 40 - line 71 * * column 3, line 27 - line 73 * * figure 1 *	1,5	TECHNICAL FIELDS SEARCHED (Int. Cl.5)
X	---	1,5	F23G F23D F23M
X	GB-A-1 206 455 (ESSO RES. & ENG.) * page 2, line 65 - line 127 * * figure 2 *	1,5	
X	---	1,5	
X	DE-C-711 023 (KLÖCKNER-HUMBOLDT-DEUTZ) * the whole document *	1,5,6	
P,X	---		
P,X	EP-A-0 498 516 (MAXON CORP.) * column 5, line 9 - column 6, line 23 * * figures 1,2 *		
A	---		
A	EP-A-0 053 454 (MAXON CORP.) -----		
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 02 SEPTEMBER 1993	Examiner LEITNER J.
<b>CATEGORY OF CITED DOCUMENTS</b> 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			

