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(71) Applicant : **Ente per le nuove tecnologie,
l'energia e l'ambiente (ENEA)
Viale Regina Margherita 125
I-00198 Roma (IT)**

(72) Inventor : **Floris Francesco
Via Dante 254 M
It-09128 Cagliari (It)
Inventor : Partesotti Corrado
Via Nirano 43
It-41040 Spezzano (It)**

(74) Representative : **Sarpi, Maurizio
Studio FERRARIO Via Collina, 36
I-00187 Roma (IT)**

(54) **Automatically operated burner of coal dust or any other solid fuel.**

(57) A burner of coal dust or any other powdery solid fuel includes a powder fuel metering device (1) and an enbloc combustion head having horizontal axis which is supplied by said metering device and includes a plurality of tubular coaxial ducts, i.e. a central cylindrical duct (20) for supplying coal dust mixed with air which is provided with an atomizing nozzle (21), a concentric tubular duct (24) for the swirling air, a duct (26) for the air-gas mixture which is provided with a ring of auxiliary firing holes (28), and a duct (29) for the combustion air surrounding the whole assembly and provided at its end with a ring of holes (32) converging to the axis and axially misaligned so as to cause the air to swirl.

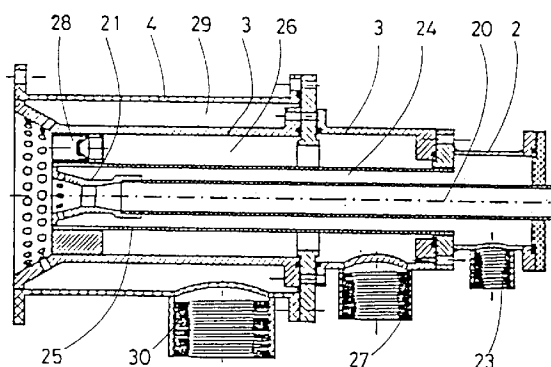


FIG. 4

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EUROPEAN SEARCH REPORT

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EP 91 83 0476

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)
Y	US-A-4 688 496 (SCHRETER) * column 2, line 43 - line 50 * * column 3, line 27 - column 4, line 17 * * figures 1,5 * ---	1,9	F23D1/00 F23D17/00 F23K3/02
Y	DE-A-3 206 074 (KÖRTING HANNOVER) * page 15, paragraph 1 * * page 19, paragraph 3 * * figures 1,9 * ---	1,9	
Y	US-A-4 408 548 (SCHMALFELD) * column 5, line 15 - line 36 * * column 8, line 59 - column 9, line 18 * * column 11, line 35 - line 49 * * figures 1,2,5,6 * ---	1,16	
Y	DE-A-3 530 683 (PILLARD FEUERUNGEN) * column 5, line 51 - column 6, line 7 * * figure * -----	1,16	
			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			F23D F23K
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 24 AUGUST 1992	Examiner LEITNER J.
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			

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