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(54) Title: THE METHOD FOR BURNING FUEL IN COMBUSTION CHAMBERS OF METALLURGICAL FURNACES, STEELMAKING FURNACES, HEATING BOILERS AND POWER BOILERS AND FUEL BURNING SYSTEM IN COMBUSTION CHAMBERS OF METALLURGICAL FURNACES, STEELMAKING FURNACES, HEATING BOILERS AND POWER BOILERS

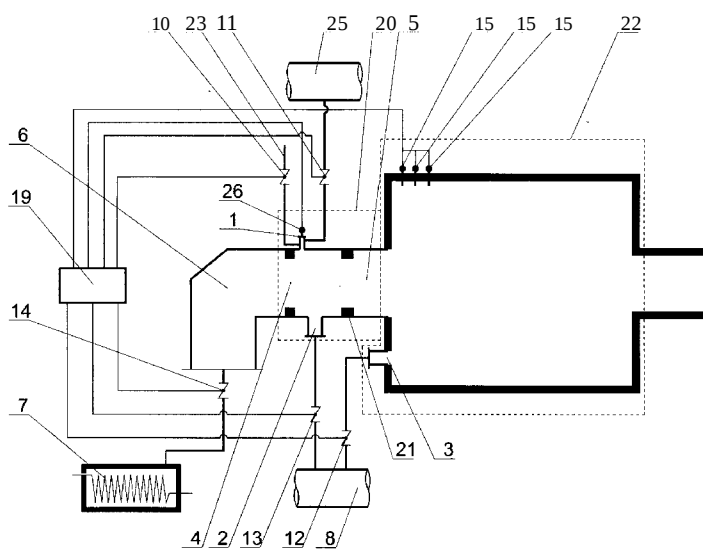


Fig. 2

(57) Abstract: Method for burning fuel, wherein in order to obtain temperature T necessary for initializing the F2 operating mode, first the combustion chamber is preheated with burning products from the F1 operating mode to temperature T_k and the air supplying the burner is preheated in the heat exchanger to temperature T_{AIR} , which can range from the ambient temperature to 450°C , and maximally to 600°C . This relationship is defined by $T = 1/2(T_k + T_{AIR})$, after meeting this condition the secondary fuel is supplied at the F2 operating mode. At the F2 operating mode, the fuel is supplied through one lance with a nozzle, from which a stream flows parallel to the stream of burning mixture of the air and fuel from the first burning segment and exhaust gases, mixes and burns together causing the extension of the flame, extension of the burning time, even distribution of temperatures in the combustion chamber and low emission of toxic compounds.

INTERNATIONAL SEARCH REPORT

International application No
PCT/PL2011/000063

A. CLASSIFICATION OF SUBJECT MATTER
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ADD.

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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Y	column 3, line 6 - line 30 column 4, line 22 - line 35 column 5, line 46 - column 6, line 13; figures 1,5,7 -----	2-8
Y	Wo 96/37734 AI (CANADIAN GAS RESEARCH INST [CA]) 28 November 1996 (1996-11-28) page 44, lines 12-14 -----	2-8
X	EP 0 343 746 A2 (TOKYO GAS CO LTD [JP]) 29 November 1989 (1989-11-29)	1
A	page 2, line 49 - page 3, line 38; figures -----	2-8
A	US 2002/090583 AI (CAIN BRUCE E [US]) 11 July 2002 (2002-07-11) paragraphs [0027] - [0030] ----- -/-	1-8



Further documents are listed in the continuation of Box C.



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International application No
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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
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INTERNATIONAL SEARCH REPORT

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