



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
16.04.2003 Bulletin 2003/16

(51) Int Cl.7: **F27D 17/00**, F27B 17/00,
F23L 15/02

(43) Date of publication A2:
29.05.2002 Bulletin 2002/22

(21) Application number: **01127369.5**

(22) Date of filing: **21.11.2001**

(84) Designated Contracting States:
**AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU
MC NL PT SE TR**
Designated Extension States:
AL LT LV MK RO SI

(72) Inventor: **Gerardi, Elio**
41100 Modena (IT)

(74) Representative: **Modiano, Guido, Dr.-Ing. et al**
Modiano Gardi Patents,
Via Meravigli, 16
20123 Milano (IT)

(30) Priority: **23.11.2000 IT MO000251**

(71) Applicant: **IFT S.r.l.**
41100 Modena (IT)

(54) **Intermittent combustion kiln, particularly for ceramic articles**

(57) An intermittent combustion kiln, particularly for ceramic articles, comprising a chamber (C) for thermal treatment of the articles, which is provided with a plurality of first burners (2), with a circuit for aspirating and evacuating the exhaust gases generated during the thermal treatment, and with at least one second regenerative-type burner (3) with heat recovery of the exhaust gases of the chamber, which is adapted to introduce in the chamber (C) hot combustion gases and to aspirate

from the chamber the exhaust gases, recovering their residual heat, the second regenerative-type burner being provided with at least one regenerative exchanger which is connected to the chamber, which is associable with at least one intake (7) for comburent air and with at least one outlet (8) for the cold exhaust gases, and is adapted to be crossed alternately by the exhaust gases of the chamber, accumulating their residual heat, and by the incoming comburent air, transferring thereto the accumulated heat.

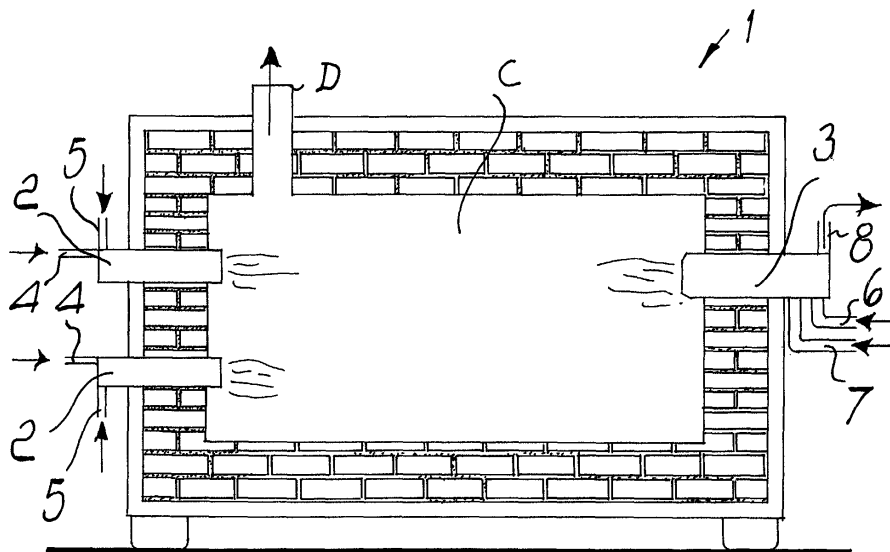


Fig. 1



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 01 12 7369

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.7)
Y	EP 1 018 619 A (NIPPON FURNACE KOGYO KK, KANAGAWA, JP) 12 July 2000 (2000-07-12) * column 1, line 5 - line 10 * * column 7, line 24 - column 9, line 37 * * column 13, line 17 - line 20 * * column 20, line 7 - line 25 * * figure 7 *	1-4,8	F27D17/00 F27B17/00 F23L15/02
Y	PATENT ABSTRACTS OF JAPAN vol. 1999, no. 13, 30 November 1999 (1999-11-30) & JP 11 223467 A (NGK INSULATORS LTD), 17 August 1999 (1999-08-17) * abstract *	1-4,8	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			F27B F27D F23L F23C C21D
The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
THE HAGUE		25 February 2003	Peis, S
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	

EPC FORM 1503 03/02 (EPAC01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 01 12 7369

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

25-02-2003

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 1018619	A	12-07-2000	JP 11094239 A	09-04-1999
			CA 2304464 A1	08-04-1999
			EP 1018619 A1	12-07-2000
			US 6234789 B1	22-05-2001
			WO 9917060 A1	08-04-1999
<hr/>				
JP 11223467	A	17-08-1999	NONE	
<hr/>				

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82