



Europäisches Patentamt
European Patent Office
Office européen des brevets



(11)

EP 0 939 280 A3

(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3:
08.01.2003 Bulletin 2003/02

(51) Int Cl.7: **F24B 5/02, F24B 1/24**

(43) Date of publication A2:
01.09.1999 Bulletin 1999/35

(21) Application number: **99660035.9**

(22) Date of filing: **23.02.1999**

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

(72) Inventor: **Keronen, Tapani**
83940 Nunnanlahti (FI)

(74) Representative: **Tanskanen, Jarmo Tapio et al**
Papula Rein Lahtela Oy,
P.O. Box 981
00101 Helsinki (FI)

(30) Priority: **26.02.1998 FI 980446**

(71) Applicant: **Nunnanlahden Uuni Oy**
83940 Nunnanlahti (FI)

(54) **Heat storing fireplace**

(57) Heat storing fireplace comprising a firebox (2) provided with a grate (1) and a combustion space (3) above it, side channels (4,6) on both sides of the firebox and combustion space, leading to a chimney flue, heat storing material (5) placed above the combustion space, throat apertures (11,12) opening from the combustion space below the heat storing material for passing the combustion gases into the side channels, and a circulation channel (7) disposed around the heat storing material for passing hot gases around it. The circulation channel (7) forms a combustion gas channel surrounding the heat storing material (5) by its sides and top. In addition, the fireplace is provided with at least one flow controller (8, 9, 10) for directing the combustion gases asymmetrically into the side channels (4,6) so as to produce a circulating flow in a certain direction in the circulation channel (7).

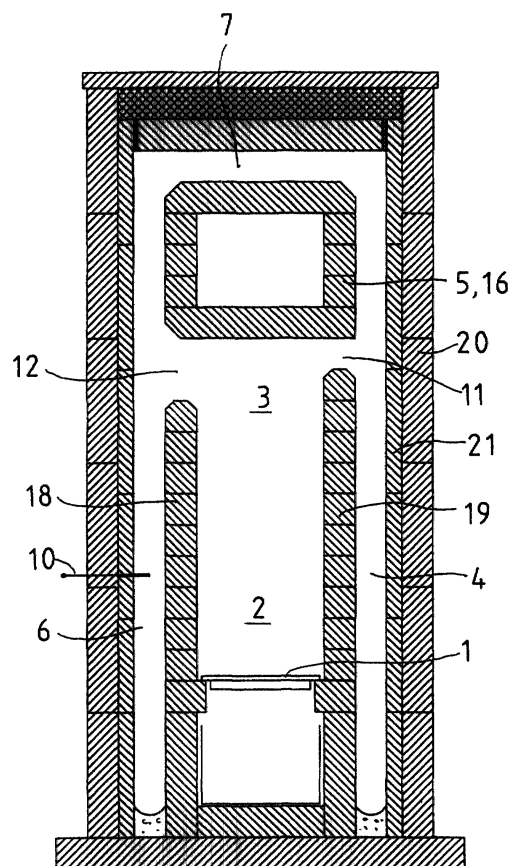


Fig 1

EP 0 939 280 A3



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 99 66 0035

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)
A	EP 0 806 142 A (NUNNANLAHDEN UUNI OY) 12 November 1997 (1997-11-12) * claims; figures *	1	F24B5/02 F24B1/24
A	US 5 347 977 A (LEHIKONEN ANTTI ET AL) 20 September 1994 (1994-09-20) * abstract *	1	
A	DE 450 876 C (CARL HOFF) 10 October 1927 (1927-10-10)		
			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			F24B
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 14 November 2002	Examiner Vanheusden, 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			

EPO FORM 1503 03 82 (p04c01)

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

EP 99 66 0035

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.

14-11-2002

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
EP 0806142	A	12-11-1997	FI	99274 B	15-12-1997
			AT	207695 T	15-11-2001
			DE	69707747 D1	06-12-2001
			EP	0806142 A1	12-11-1997

US 5347977	A	20-09-1994	FI	905306 A	27-04-1992
			AT	399574 B	26-06-1995
			AT	902891 A	15-10-1994
			AU	8526591 A	26-05-1992
			CA	2094613 A1	27-04-1992
			CH	682010 A5	30-06-1993
			DE	4192745 C2	07-11-1996
			DE	4192745 T0	18-11-1993
			WO	9208080 A1	14-05-1992
			SE	501522 C2	06-03-1995
			SE	9301370 A	23-04-1993

DE 450876	C	10-10-1927	NONE		
