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(54) **Device for flow management in combined heating units for sanitary water and house rooms and boiler unit for combined heating of sanitary water and house rooms**

(57) Boiler unit including a first circuit for heating of heat-transferring fluid to be sent to a heating system (17) for house rooms and a second circuit for heating of sanitary water to be sent to sanitary water users (16) with said first circuit including a primary heat exchanger (14) for heating the heat-transferring fluid and said second circuit including a secondary heat exchanger (21) for heating sanitary water with said boiler unit including de-

tection means (24) of the required heated sanitary water flow and means (22, 23) of diverting from said first circuit a fraction of the flow of the heat-transferring fluid to send it to the secondary heat exchanger (21) with said diversion means (22, 23) being controlled by control means (26) connected to the detection means (24) to regulate the size of said fraction as a function of the detected sanitary water flow requirement.

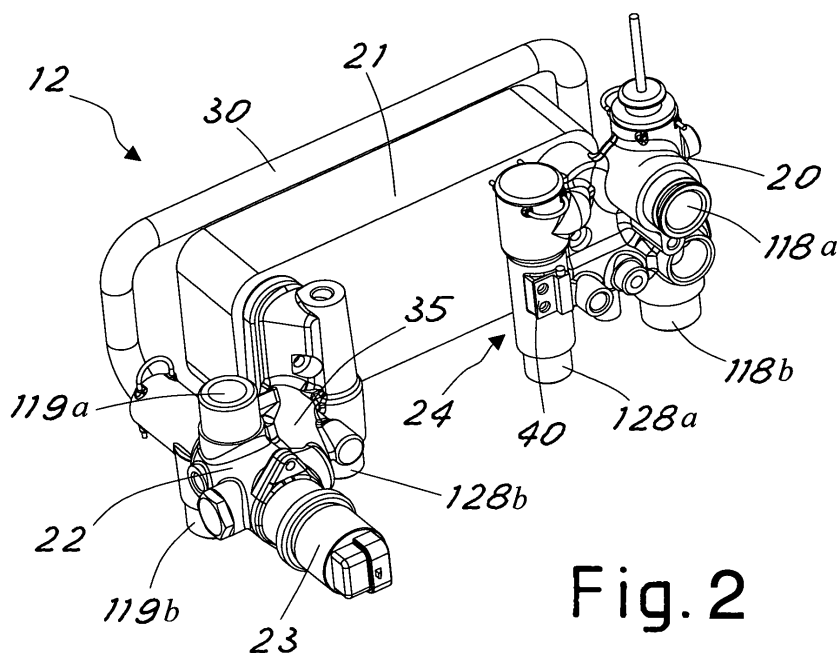


Fig. 2



DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
Y	GB 1 529 680 A (BRITISH GAS CORP) 25 October 1978 (1978-10-25) * page 2, line 30 - line 55; figures * -----	1,2,4-6, 8-11,14, 15,21	F24H9/14
Y	GB 1 270 101 A (VERNER OVERGAARD) 12 April 1972 (1972-04-12) * page 1, line 8 - page 2, line 61; figures * -----	1,2,4-6, 8-11,14, 15,21	
A	GB 1 364 820 A (SAUNIER DUVAL) 29 August 1974 (1974-08-29) * the whole document * -----	3,12	
A	GB 1 582 268 A (CHAFFOTEUX ET MAURY) 7 January 1981 (1981-01-07) * page 2, line 4 - page 3, line 4; figures * -----	1,8	
A	FR 2 330 968 A (VAILLANT SA) 3 June 1977 (1977-06-03) * page 2, line 18 - page 4, last line * -----	1,8	TECHNICAL FIELDS SEARCHED (IPC) F24D
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 20 March 2006	Examiner Van Gheel, 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	

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

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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
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20-03-2006

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
GB 1529680	A	25-10-1978	NONE	
GB 1270101	A	12-04-1972	NONE	
GB 1364820	A	29-08-1974	DE 2306748 A1	30-08-1973
			FR 2173450 A5	05-10-1973
			JP 951048 C	27-04-1979
			JP 48098453 A	14-12-1973
			JP 53025133 B	25-07-1978
GB 1582268	A	07-01-1981	BE 856728 A1	12-01-1978
			DE 2729718 A1	19-01-1978
			ES 460937 A1	16-05-1978
			FR 2358622 A1	10-02-1978
			IT 1080269 B	16-05-1985
			NL 7706815 A	16-01-1978
FR 2330968	A	03-06-1977	NONE	