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(54) **Storage boiler of the combined type**

(57) A storage boiler (1) of the so-called combined type, comprises a secondary heat exchanger (4) provided with respective first thermal exchange means for heating sanitary water supplied to said exchanger (4), a unit (5) for producing and storing hot sanitary water provided with respective second thermal exchange means (19) for heating the sanitary water stored within said unit (5), and a secondary hydraulic circuit (20) for the circulation of sanitary water, provided with means (27) for selectively drawing off the sanitary water heated by said secondary heat exchanger (4) and/or by said unit (5) for producing and storing hot sanitary water. The storing unit (5) is arranged in the secondary hydraulic circuit (20) for the circulation of sanitary water in parallel to the secondary heat exchanger (4). In the boiler of the invention the second thermal exchange means (19) provided in the unit (5) for producing and storing hot sanitary water is essentially in parallel to the first thermal exchange means, so that heating of the unit (5) for producing and storing hot sanitary water may be independently carried out with respect to the secondary heat exchanger (4).

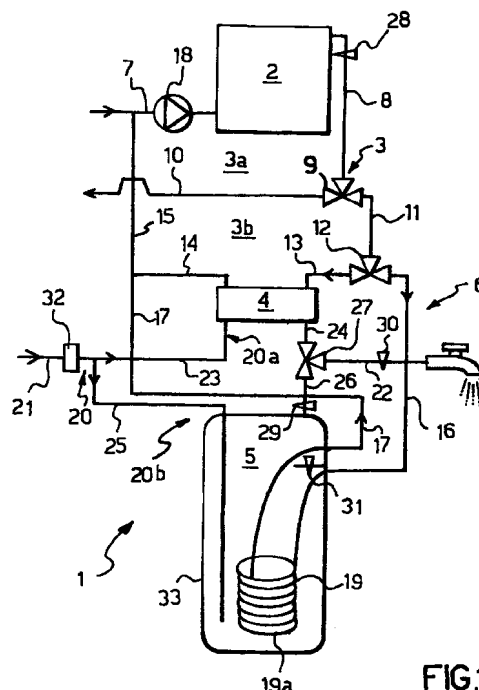


FIG.1

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EUROPEAN SEARCH REPORT

Application Number
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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)
X	FR 2 551 187 A (LAURENT FRANCOIS) 1 March 1985 (1985-03-01) * the whole document *	1-3,5,6, 13	F24D3/08
A	GB 1 205 706 A (SOCIETE GENERALE DE FONDERIE) 16 September 1970 (1970-09-16) * figures *	1	
A	FR 2 557 274 A (DEBOFFLES REGIS) 28 June 1985 (1985-06-28) * claims; figure 1 *	1	
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int.Cl.7) F24D F24H
Place of search THE HAGUE		Date of completion of the search 20 September 2000	Examiner Van Gestel, H
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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**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 00 20 0973

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20-09-2000

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
FR 2551187	A	01-03-1985	NONE	
GB 1205706	A	16-09-1970	BE 712885 A	31-07-1968
			CH 500441 A	15-12-1970
			DE 1778264 A	29-07-1971
			ES 352706 A	01-09-1969
			LU 55777 A	16-06-1968
			NL 6805183 A	15-10-1968
FR 2557274	A	28-06-1985	NONE	