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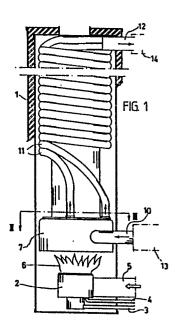
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## (54) Apparatus to circulate and heat liquid.

Apparatus to circulate and heat liquid, such as water, which apparatus includes an incorporated or separate source of heat (2) and a liquid inlet pipe (10) and a liquid outlet pipe (12), and inside which apparatus is arranged, connected to the outlet pipe (12), a preferably spiral pipe (11) for heating the liquid to its final temperature. In known heating systems, it is not enough to heat the water, also a circulation water pump is needed. With this invention, the need for a circulation water pump is eliminated by that the inlet pipe (10) and the outlet pipe (12) are each equipped with a back-pressure valve (13, 14), and that inside the apparatus, between the inlet pipe (10) and the spiral pipe (11) is installed an element (7) comprising a liquid space (8) with a direct connection to the inlet pipe (10) and the spiral pipe (11) and, connected with said space, a vaporizing space (9) which quickly vaporizes the liquid.



## **EUROPEAN SEARCH REPORT**

Application Number

EP 87 85 0274

ategory	DOCUMENTS CONSIDER  Citation of document with indication	on, where appropriate.	Relevant	CLASSIFICATION OF THE
	of relevant passages		to claim	APPLICATION (Int. Cl. 4)
Α	WO-A-8 102 195 (RHODIN * Abstract *	)	1	F 24 H 1/06
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				TECHNICAL FIELDS SEARCHED (Int. Cl.4)
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	The present search report has been dra	wn up for all claims		
Place of search THE HAGUE		Date of completion of the search 31–05–1988	VAN	Examiner GESTEL H.M.
X : parti Y : parti docu	ATEGORY OF CITED DOCUMENTS cularly relevant if taken alone cularly relevant if combined with another ment of the same category nological background	T: theory or princ E: earlier patent	ciple underlying the i document, but publis g date d in the application d for other reasons	nvention

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