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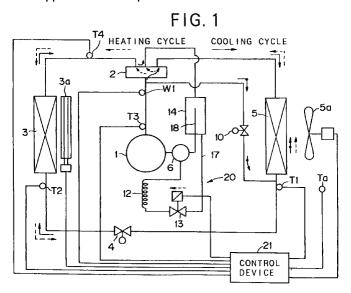
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(54) Refrigerating cycle

(57) In a refrigerating cycle (air conditioner) using mixture refrigerant, a mixing ratio of the refrigerant in a refrigerant circuit is measured by a mixing ratio detector (W1), and a controller (21) receives the detection signal to open a control valve (13) when the mixing ratio of a high boiling-point refrigerant component is low, whereby the high boiling-point refrigerant stocked in a liquid reservoir (14) is returned to the refrigerant circuit. The high boiling-point refrigerant which is supplied from the liquid

reservoir (14) through the opening operation of the control valve (13) is supplied from a low pressure side of a compressor (1) into the refrigerant circuit to keep the mixing ratio of the refrigerant circulating in the refrigerant circuit to a predetermined value, thereby preventing abnormal increase of pressure of the refrigerant due to variation of the mixing ratio.



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EUROPEAN SEARCH REPORT

Application Number

EP 95 11 7514

	DOCUMENTS CONSID	ERED TO BE RELEVANT		
Category	Citation of document with i of relevant pass	ndication, where appropriate, ages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.CI.6)
P,X	EP 0 631 095 A (HIT 1994 * claims; figures *	TACHI LTD) 28 December	1-16	F25B13/00 F25B49/02 C09K5/04
X	EP 0 586 193 A (HIT	 「ACHI LTD) 9 March 1994		
	* claims; figures *	•	16	
A	US 3 668 882 A (SAF June 1972	RSTEN JAN A ET AL) 13		
A	US 5 186 012 A (CZA 16 February 1993	CHORSKI MAREK ET AL)		
A	US 2 277 138 A (NEW	 /TON) 24 March 1942 		
				TECHNICAL FIELDS
				SEARCHED (Int.CI.6) F25B
				rzob
	The present search report has b	een drawn up for all claims		
	Place of search	Date of completion of the search		Examiner
	THE HAGUE	27 November 1997		Schepper, H
X : partic Y : partic docur A : techr	TEGORY OF CITED DOCUMENTS ularly relevant if taken alone ularly relevant if combined with anoth nent of the same category ological background written disclosure	L : document cited f	cument, but publisite in the application or other reasons	hed on, or
	vritten disclosure nediate document	& : member of the s document	ame patent family,	corresponding