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(54) Heating and cooling system and pump therefor

(57) A system (2) for heating and/or cooling a plurality of separate locations in a building (4) comprising two heat-transfer circuits (6,7), each circuit (6,7) adapted to circulate a heat transfer medium from a heat source and/or a heat sink to a heat exchanger in each location, wherein the first heat-transfer circuit is able to supply the net cooling requirement of the heat exchangers and the second heat-transfer circuit is able to supply the net heating requirement of the heat exchangers during periods of conflicting requirements, and wherein both heat-transfer circuits (6,7) are able to supply the overall cooling requirement and the overall heating re-

quirement of all the heat exchangers is described.

Also described is a heat pump unit (28) comprising a circuit (30) containing a heat-transfer medium which connects two or more primary heat exchangers (31,32), each heat exchanger being able to exchange heat with an associated heat-transfer circuit, with one or more compressors (34) between the primary heat exchangers (31) and one or more secondary heat exchangers (32) adapted to alter if necessary the temperature of the heat-transfer medium in the circuit, suitable for use with the system for heating and/or cooling also described herein.

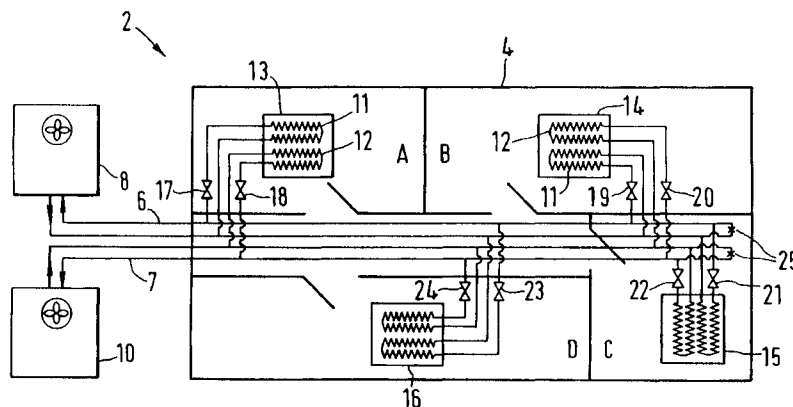


FIG.1



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 95 30 7633

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)
X	US 3 910 345 A (WHALEN JAMES J) * column 5, line 33 - column 7, line 20; figure 1 *	1,4-6, 10,11,14	F24F3/06 F24F3/08
Y A	---	22 2,3,7,8, 12,13	
X	EP 0 281 762 A (TAKENAKA KOMUTEN CO ;SHINKO KOGYO KK (JP)) * column 5, line 38 - line 52; figure 1 *	15,20, 21,24	
Y A	-----	22 16,17,19	
			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			F24F
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 19 September 1997	Examiner Peschel, G
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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