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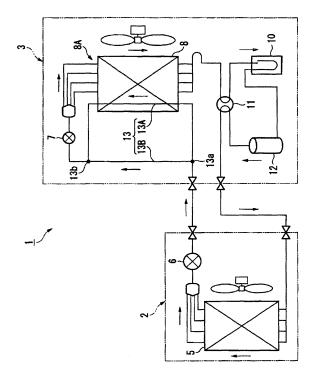
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#### (54) Cooling cycle apparatus and method of operating the same

(57)A cooling cycle apparatus and a method of operating the same that is capable of preventing frost or ice formation at the lower part of an outdoor heat exchanger (8) without damage to hot line function and improving heating capacity. A refrigerant pipe (13) is connected between an indoor expansion valve (6) and an outdoor expansion valve (7). The refrigerant pipe (13) is branched into a hot line pipe (a first pipe) (13A), which extends through a part of the outdoor heat exchanger (8), and a bypass pipe (a second pipe) (13B), which does not extend through the outdoor heat exchanger (8). The refrigerant pipe is designed such that a predetermined circulating amount of the refrigerant can be divided through the hot line pipe (13A) and the bypass pipe (13B) at a predetermined ratio.

Fig 1



EP 1 610 076 A3



## **EUROPEAN SEARCH REPORT**

Application Number EP 05 01 3389

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Category	Citation of document with ir of relevant pass	ndication, where appropriate, ages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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P : inte	rmediate document	document	•	· -

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