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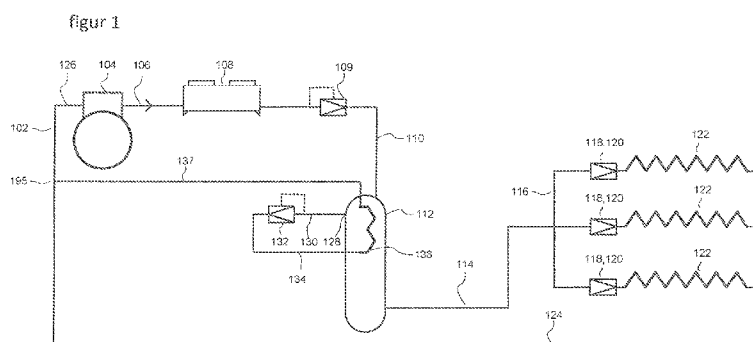
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(54) Title: REFRIGERATION SYSTEM



(57) Abstract: The present invention relates to a refrigeration system primarily using CO₂ as refrigerant, which system comprises a receiver, where a liquid outlet is connected to expansion valves, which are connected to evaporators, which are connected to the suction side of the compressor, which receiver comprises a second gas outlet, which is connected to a second pressure reduction device. It is the object of the invention to reduce the energy consumption in CO₂ cooling systems, a further object is to protect one or more compressors against liquid CO₂ in the compressor inlet by heating the suction gas. The second pressure reduction device is connected by tubing to a first heat ex-changing device, which first heat exchanging device is integrated in the receiver. Hereby can be achieved that gas that is evaporated in the top of a receiver can be used for cooling the liquid part of the same receiver. Because the gas is sent to a pressure reduction valve, the temperature is decreased in the gas, before the gas is sent into a heat exchanging device from which heat exchanging device the gas is sent to the suction side of the compressor.

INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
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According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

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C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 2006/091190 A1 (CARRIER CORP [US]; GUPTA NEELKANTH S [US]) 31 August 2006 (2006-08-31)	1
A	page 4 - page 10; figures 1, 2 -----	2-7
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A	US 4 551 983 A (ATSUMI AKIRA [JP] ET AL) 12 November 1985 (1985-11-12) the whole document -----	1-7
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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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INTERNATIONAL SEARCH REPORT

Information on patent family members

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