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(54) **Multi-function cooling unit for air-conditioning systems**

(57) Multi-function cooling unit (1) for air-conditioning systems comprising a first heat exchanger (2), with which a refrigerant exchanges heat with the outside environment; a second heat exchanger (3) with which said refrigerant exchanges heat with a first liquid circulating in the hydraulic circuit of said air-conditioning system; a third heat exchanger (4), where the refrigerant exchange

es heat with a second liquid; a compression device (5) for compressing said refrigerant, at which said refrigerant is compressed; and a distributor (6) for distributing said refrigerant, and which selectively connects said compression device (5) to said first (2), second (3), and/or third heat exchanger (4); said distributor (6) comprises a first (23) and a second reversing four way valves (24) connected in series with respect to each other.

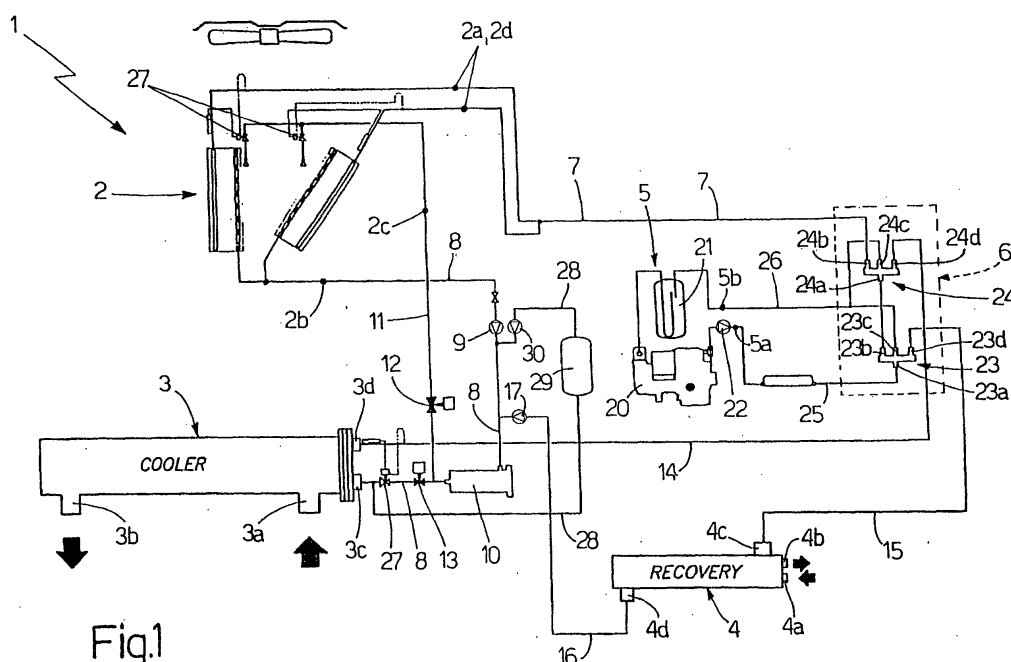


Fig.1



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The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
THE HAGUE		16 September 2003	SOGNO, M
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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**ANNEX TO THE EUROPEAN SEARCH REPORT
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