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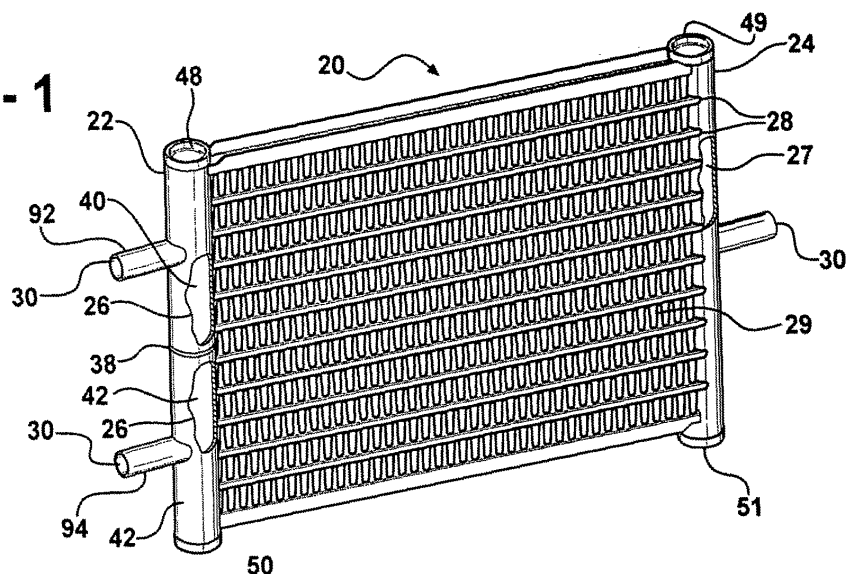
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(54) Dual mode heat exchanger assembly

(57) A dual mode heat exchanger (20) has a first and second manifold (22, 24) with a plurality of flow tubes (28) fluidly connecting the manifolds (22, 24) for passing refrigerant between the manifolds (22, 24). The first manifold (22) is divided into at least two chambers (40, 42). The second manifold (24) defines a single cavity (27) but can form more than one chamber. Separators divide the cavities (26, 27) and are offset from each other creating groups of flow tubes (28) that connect one chamber in

each manifold. At least one port (28) in each chamber of one of the manifolds (22, 24) is in the open position for controlling refrigerant circulation. All of the ports (30) are opened in one of the manifolds (22, 24) to permit refrigerant to pass through all of the plurality of tubes (28) in at least one pass in evaporator mode (34). At least one of the ports (30) is closed to permit refrigerant to pass through all of the plurality of flow tubes (28) in at least two passes in condenser mode (36).

FIG - 1**EP 1 895 255 A3**



EUROPEAN SEARCH REPORT

Application Number
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The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 16 October 2008	Examiner Bain, David
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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