

## Title (en)

Refrigeration system with integrated oil cooling heat exchanger

## Title (de)

Kälteanlage mit eingegliedertem Wärmetauscher zur Ölkühlung

## Title (fr)

Système frigorifique avec échangeur de chaleur intégré pour le refroidissement d'huile

## Publication

**EP 0924478 A3 20000322 (EN)**

## Application

**EP 98630074 A 19981211**

## Priority

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## Abstract (en)

[origin: EP0924478A2] The refrigeration system includes a substantially liquid refrigerant and an evaporator (22) for transferring heat from the air to the substantially liquid refrigerant. The substantially liquid refrigerant becomes a low temperature, low pressure first substantially gaseous refrigerant. A compressor (12) compresses the first substantially gaseous refrigerant into a high pressure, high temperature superheated second gaseous refrigerant. A lubricant circuit supplies lubricant to the compressor (12). A condenser (16) rejects heat from the second gaseous refrigerant and forms a high pressure, lower temperature sub-cooled liquid refrigerant. The condenser (16) has an output stream. A metering device (20) transforms the sub-cooled liquid refrigerant into the substantially liquid refrigerant for the evaporator (22). A heat exchanger (18) includes a coolant circuit for circulating coolant in a first coolant path on route to the compressor (12); a lubricant circuit (51) for circulating lubricant in a second lubricant path on route to said compressor (12) for cooling via heat exchange with said coolant, and a refrigerant circuit (49) for circulating said sub-cooled liquid refrigerant in a third refrigerant path on route to the metering device (20) for cooling via heat exchange with said coolant. <IMAGE>

## IPC 1-7

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## Citation (search report)

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