

Title (en)

Refrigeration system subcooling flow control valve.

Title (de)

Unterkühlungsstromregelventil für Kälteverfahren.

Title (fr)

Vanne de régulation d'écoulement de sous-refroidissement pour système frigorifique.

Publication

EP 0504775 A2 19920923 (EN)

Application

EP 92104505 A 19920316

Priority

- US 61736491 A 19910319
- US 61737091 A 19910319

Abstract (en)

A flow control valve is disclosed in a household refrigeration appliance having a vapor compression refrigeration system comprising a cyclically operated compressor, a condenser, an evaporator and an expansion device between the condenser and the evaporator. The refrigerant flow control valve is disposed between the condenser and the evaporator and comprises a housing defining a refrigerant flow chamber for receiving liquified refrigerant from the condenser outlet, valve seat structure defining a refrigerant flow port for communicating refrigerant from the condenser to the evaporator, and a flow controlling valve assembly coacting with the valve seat structure to control the refrigerant flow from the refrigerant flow chamber to the expansion device. The flow control valve controls system refrigerant flow in response to subcooling, blocks refrigerant flow from the condenser when the compressor is cycled off and enables circulation of hot gaseous refrigerant under extreme high temperature ambient conditions.

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IPC 8 full level

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Cited by

US5822999A; EP0898131A1; US5996900A; US6134900A; EP0931991A3; EP0805318A2

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