

Title (en)  
Hot gas defrosting of refrigeration plants

Title (de)  
Heissgasabtau für Kälteanlagen

Title (fr)  
Dégivrage par gaz chaud pour installations frigorifiques

Publication  
**EP 1422487 A2 20040526 (EN)**

Application  
**EP 03026471 A 20031120**

Priority  
DK PA200201801 A 20021121

Abstract (en)  
In refrigeration systems using CO<sub>2</sub> as effective refrigerant there are severe problems with respect to defrosting in freezer equipments calling for operative defrosting, e.g. in plate freezer units in fishing vessels. The invention provides for a refrigeration plant comprising at least one compressor unit (12), which compressor unit (12) is delivering compressed refrigerant to at least one condenser (14), from which condenser liquid refrigerant is led to at least one evaporator (8) through at least one restriction element, where the compressor is connected to the evaporator, and where a defroster circuit (56) is arranged for selectively supplying hot refrigerant to said evaporator equipment (8) for defrosting purposes, whereby at least one compressor unit (12) comprises at least a first compressor section (52) and a second compressor section (54), which first and second compressor sections (52,54) are operating in serial connection during defrost, where the first and second compressor sections (52,54) are operating in parallel during normal operation, where the pressure outlet of the second compressor section (54) during defrost is connected to a gas pipe connection (56) which is connected to a refrigerant channel system of said evaporator equipment (8).

IPC 1-7  
**F25B 47/02**; **F25B 25/00**

IPC 8 full level  
**F25B 1/10** (2006.01); **F25B 7/00** (2006.01); **F25B 9/00** (2006.01); **F25B 47/02** (2006.01)

CPC (source: EP)  
**F25B 1/10** (2013.01); **F25B 7/00** (2013.01); **F25B 9/008** (2013.01); **F25B 47/022** (2013.01); **F25B 2309/06** (2013.01); **F25B 2400/075** (2013.01); **F25B 2400/22** (2013.01)

Citation (applicant)  
• DK 2001000310 A  
• US 4962647 A 19901016 - KUWAHARA EIJI [JP]

Cited by  
EP1775531A1; FR3089603A1; CN106705516A; FR2886719A1; EP2135017A4; EP2019272A3; US7900467B2; WO2020115449A3; WO2006129034A3; WO2009158612A3

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)  
**EP 1422487 A2 20040526**; **EP 1422487 A3 20080213**

DOCDB simple family (application)  
**EP 03026471 A 20031120**