

Title (en)

Installation for refrigerating products under vacuum.

Title (de)

Anlage zur Kühlung von Produkten unter Vakuum.

Title (fr)

Installation pour réfrigérer des produits sous vide.

Publication

EP 0209170 A1 19870121 (EN)

Application

EP 86201039 A 19860613

Priority

NL 8501978 A 19850710

Abstract (en)

Method of operating an installation for refrigerating products under vacuum, such as lettuce, which installation comprises a closable vessel for the products, one or more vacuum pumps adapted to produce a vacuum in the interior of the vessel, a water vapour condenser (1) disposed in the vessel through which a refrigerant can be passed, and a refrigerating unit comprising a compressor (7), a condenser (9) and a throttle valve (13), disposed outside the vessel and an evaporator being formed by said water vapour condenser (1) disposed in the vessel, whereby a low-pressure separator (3) is provided for liquid and vaporous refrigerant, the suction pipe (6) of the compressor (7) and the outlet pipe (14) of the throttle valve (13), as well as the two pipes (2 and 4) of the water vapour condenser (1), being connected to said separator, while a high-pressure vessel (11) for liquid refrigerant is disposed between the refrigerant condenser (9) and the throttle valve (13), whereby the compressor (7) is brought into action, with the throttle valve (13) open, approximately simultaneously with the vacuum pump or pumps and the throttle valve (13) is closed at reaching the evaporation temperature of the water in the product.

IPC 1-7

F25B 1/00; F25D 31/00

IPC 8 full level

F25B 1/00 (2006.01); F25D 31/00 (2006.01)

CPC (source: EP)

F25B 1/00 (2013.01); F25D 31/00 (2013.01)

Citation (search report)

- [AD] US 2748576 A 19560605 - PEUKERT SR THEODORE J, et al
- [A] US 3319434 A 19670516 - MATESANZ ANGEL C
- [A] KOELTECHNIEK, vol. 74, no. 5, May 1981, pages 106-110; H.J.N. VERHOEF: "Aspecten bij het ontwerpen van vacuumkoelinstallaties"

Designated contracting state (EPC)

AT BE CH DE FR GB IT LI LU NL SE

DOCDB simple family (publication)

EP 0209170 A1 19870121; EP 0209170 B1 19890111; AT E40000 T1 19890115; DE 3661776 D1 19890216; ES 556521 A0 19870716; ES 8706932 A1 19870716; NL 8501978 A 19870202

DOCDB simple family (application)

EP 86201039 A 19860613; AT 86201039 T 19860613; DE 3661776 T 19860613; ES 556521 A 19860624; NL 8501978 A 19850710