Title (en)

Improvements in or relating to freezers.

Title (de)

Gefriereinrichtungen.

Title (fr)

Congélateurs.

Publication

EP 0098052 A2 19840111 (EN)

Application

EP 83303118 A 19830531

Priority

GB 8218572 A 19820626

Abstract (en)

A freezer, having an outer housing (1) and a door (2), contains a number of shelves (3 to 6) upon which frozen food (7) is stored. Each shelf comprises a casing (8) filled with brine solution (10) having an eutectic temperature a few degrees lower than the desired operating temperature of the freezer. An evaporator coil (9), forming part of a refrigeration system; including a compressor, of the freezer, is immersed in the brine solution (10) in each casing. During the night storage period, the compressor is run on cheap rate electricity and the brine solution (10) gives up heat energy, thereby undergoing a phase change. During the daytime, the compressor is stopped and the brine solution (10) slowly absorbs heat energy from within the freezer, thereby slowly undergoing a reverse phase change and maintaining a substantially constant desired operating temperature of the freezer.

IPC 1-7

F25D 11/00; F25D 25/02

IPC 8 full level

F25D 11/00 (2006.01); F25D 25/02 (2006.01)

CPC (source: EP)

F25D 11/00 (2013.01); F25D 11/006 (2013.01); F25D 25/028 (2013.01)

Cited by

FR2678718A1; KR20130071576A; EP0141840A4; CN108603718A; CN109442849A; EP0794396A1; CN110487001A; EP1327837A3; GB2569064A; DE4331934C1; CN107709907A; FR2745894A1; EP1124101A3; CN103597300A; US10156395B2; US9523522B2; WO9909359A1; US10188223B2; US9726418B2; WO2018057147A1; WO2017099913A1; WO2004063648A1; WO9405959A1; WO2015100119A1; WO2016179215A1: EP3087332B1

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