

Title (en)

Refrigeration system for a chilled product vending system.

Title (de)

Kühlverfahren für eine Verkaufsanlage für gekühlte Waren.

Title (fr)

Système de refroidissement pour un dispositif de vente de produits réfrigérés.

Publication

EP 0151496 A2 19850814 (EN)

Application

EP 85101434 A 19811016

Priority

US 19817280 A 19801017

Abstract (en)

A control circuit for cycling the evaporator fans on and off independently of the operation of the compressor of the refrigeration system is described. The evaporator fan is cycled on with the compressor and continues to run during the entire compressor ON cycle. A first timer causes the evaporator fan to run for an additional delay period following the cycling OFF of the compressor and the fans continue to blow air over the evaporator coil until the temperature of the evaporator coil is sufficiently above the freezing point of water (32 DEG F, 0 DEG C). The fans are then cycled off. A second cycling timer is provided to intermittently cycle the evaporator fans on and off for predetermined short intervals following the above-described delay period, and during the time when the compressor is off. A third timer is provided to preclude freezing of the vended products and/or the evaporator coil when a vending machine is disposed in a below freezing environment. This timer is enabled when the thermostatic temperature switch which controls the compressor opens, and will time out to cycle on the evaporator fans for continuous operation for a predetermined period of time if the temperature switch remains open in excess of a predetermined period of time.

IPC 1-7

F25D 17/06; **F25D 29/00**

IPC 8 full level

F25D 11/00 (2006.01); **F25D 17/06** (2006.01); **F25D 29/00** (2006.01); **G07F 9/10** (2006.01)

CPC (source: EP)

F25D 17/06 (2013.01); **F25D 29/00** (2013.01); **G07F 9/105** (2013.01); **F25B 2600/23** (2013.01); **F25D 2400/36** (2013.01); **F25D 2700/12** (2013.01)

Cited by

US7018422B2; EP3217127A1; US7144431B2; US7891200B2; US10718561B2; WO2008120896A3

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

EP 0151496 A2 19850814; **EP 0151496 A3 19860108**; **EP 0151496 B1 19880107**; AU 528195 B2 19830421; AU 7399181 A 19820624; BR 8105359 A 19820831; CA 1169139 A 19840612; DE 3174915 D1 19860814; EP 0050333 A2 19820428; EP 0050333 A3 19820721; EP 0050333 B1 19860709; ES 505417 A0 19830101; ES 515037 A0 19830801; ES 515038 A0 19830801; ES 8302275 A1 19830101; ES 8308041 A1 19830801; ES 8308042 A1 19830801; GR 75651 B 19840802; JP S5770374 A 19820430; JP S648266 B2 19890213; MX 150410 A 19840430; ZA 815323 B 19820728

DOCDB simple family (application)

EP 85101434 A 19811016; AU 7399181 A 19810811; BR 8105359 A 19810821; CA 382717 A 19810728; DE 3174915 T 19811016; EP 81108419 A 19811016; ES 505417 A 19810911; ES 515037 A 19820816; ES 515038 A 19820816; GR 810165731 A 19810806; JP 7241381 A 19810515; MX 18956781 A 19811008; ZA 815323 A 19810803