

Title (en)

Cooling device and controlling method thereof for reefer container

Title (de)

Kühlvorrichtung und Steuerungsverfahren dafür für einen Kühlcontainer

Title (fr)

Dispositif de refroidissement et son procédé de commande pour conteneur de navire frigorifique

Publication

EP 1857758 A2 20071121 (EN)

Application

EP 07251985 A 20070515

Priority

CN 200610060671 A 20060515

Abstract (en)

A cooling device and a controlling method thereof for a reefer container are disclosed. The cooling device has a controlling circuit comprising a controller (4); a compressor relay (1), a condenser fan relay (2) and an evaporator fan relay (3) connected in parallel; a pressure switch (7) connected to the compressor relay (1) in series; and a pressure sensing and controlling device for controlling the pressure switch (7) to turn on or off. The pressure sensing and controlling device controls the pressure switch (7) to turn off when air pressure inside container drops to a preset pressure, and controls the pressure switch (7) to turn on when air pressure inside container rises higher than the preset pressure. The controlling method comprises steps of detecting and controlling air pressure inside container. The invention can be implemented in a simple structure and at a low cost, as only a few of electric elements are added to conventional controlling circuits.

IPC 8 full level

F25D 29/00 (2006.01)

CPC (source: EP US)

F25D 17/047 (2013.01 - EP US); **F25D 29/003** (2013.01 - EP US); **B65D 88/74** (2013.01 - EP US)

Citation (applicant)

- GB 2098362 A 19821117 - SEA CONTAINERS LTD
- US 4663725 A 19870505 - TRUCKENBROD GREGORY R [US], et al
- GB 2228999 A 19900912 - MITSUBISHI HEAVY IND LTD [JP]

Cited by

CN104567182A; US10145607B2

Designated contracting state (EPC)

DE FR GB

Designated extension state (EPC)

AL BA HR MK YU

DOCDB simple family (publication)

EP 1857758 A2 20071121; **EP 1857758 A3 20071226**; AU 2007201978 A1 20071129; BR PI0701090 A2 20081230; CN 101074828 A 20071121; US 2007261424 A1 20071115

DOCDB simple family (application)

EP 07251985 A 20070515; AU 2007201978 A 20070503; BR PI0701090 A 20070514; CN 200610060671 A 20060515; US 80002107 A 20070503