

Title (en)

METHOD FOR TRANSPORTING GOODS REQUIRING DIFFERENT TEMPERATURES DURING THEIR TRANSPORT

Title (de)

VERFAHREN ZUM TRANSPORT VON GÜTERN, DIE UNTERSCHIEDLICHE TEMPERATUREN WÄHREND IHRES TRANSPORTS  
ERFORDERN

Title (fr)

PROCÉDÉ PERMETTANT DE TRANSPORTER DES ARTICLES NÉCESSITANT DIFFÉRENTES TEMPÉRATURES PENDANT LEUR  
TRANSPORT

Publication

**EP 3051239 A1 20160803 (EN)**

Application

**EP 15153078 A 20150129**

Priority

EP 15153078 A 20150129

Abstract (en)

The present invention is directed to a container (1) for transporting goods (33, 34) requiring cooling during their transport. The container (1) comprises a housing (2, 3) basically having a cuboid outer shape and at least one outer door (5) to open an access (8) to at least two separate storage volumes (6, 7) in the interior (4) of the housing (2, 3), a cartridge (10) being fillable with a required amount of dry ice (22) arranged in the interior (4) of the container (1) and at least one of the following features: - the cartridge (10) is placed between an upper storage volume (6) and a lower storage volume (7), - the cartridge (10) can be placed at different heights in the housing (2, 3), - the cartridge (10) has at least a first surface area (12) and a second surface area (13) with different thermal insulations (14, 15) versus adjacent storage volumes (6, 7), - the cartridge (10) has an inhomogeneous thermal insulation (14, 15), such that during filling using liquid CO<sub>2</sub> the better insulated parts are filled with dry ice (22) first, - the housing (2, 3) contains at least one thermally insulating separating wall (16), - the cartridge (10) has at least one outlet nozzle (11) for blowing an exhaust of CO<sub>2</sub> in one or more predetermined directions or receiving storage volumes (6, 7), - the housing (2, 3) contains at least one active ventilation means (19) to guide exhausted CO<sub>2</sub> from the cartridge (10) on a certain exhaust gas flow path (21) through the housing (2, 3) to a housing outlet (20). This allows to flexibly using transport containers cooled by dry ice for different kinds and amounts of goods to be transported. It particularly allows adapting containers to different transport tasks and transporting goods, especially fresh food and deep frozen food, with different transport temperatures in the same container.

IPC 8 full level

**F25D 3/14** (2006.01)

CPC (source: EP)

**F25D 3/14** (2013.01)

Citation (applicant)

- DE 102010013079 A1 20110929 - TKT GASSYSTEME GMBH [DE]
- EP 1186842 B1 20041117 - AIR LIQUIDE [FR]

Citation (search report)

- [XYI] US 2013219948 A1 20130829 - AUREKOSKI JARMO [FI]
- [Y] WO 2010128535 A2 20101111 - ZACCHI LUCA [IT]

Cited by

EP4303506A1; CN112591267A; WO2024009151A1; WO2018155408A1

Designated contracting state (EPC)

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Designated extension state (EPC)

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DOCDB simple family (publication)

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