

Title (en)

CONTAINER WITH INTEGRAL MODULE FOR HEATING OR COOLING THE CONTENTS

Title (de)

BEHÄLTER MIT INTEGRALEM MODUL ZUR ERWÄRMUNG ODER KÜHLUNG DES INHALTS

Title (fr)

RECIPIENT A MODULE INTEGRE EN RECHAUFFANT ET EN REFROIDISSANT LE CONTENU

Publication

EP 1866581 A1 20071219 (EN)

Application

EP 05729743 A 20050317

Priority

US 2005008840 W 20050317

Abstract (en)

[origin: WO2006101482A1] A container comprises a container body for containing contents to be heated or cooled, a thermic module at one end of the body, and a closure at the other end of the body. Within the thermic module, an internal exothermic (or, alternatively, endothermic) chemical reaction is initiated to heat its contents when a user actuates the thermic module. The thermic module includes a heat exchanger portion extending proximally into the container and a thermic module cap distal to the heat exchanger portion. The heat exchanger portion has a pleated wall to improve the heat transfer to the contents of the container. The container includes a rotatable cover adhered to the container end over the closure with heat-sensitive adhesive that prevents a user from accessing the contents until a certain temperature is reached. The container further includes a full panel full-off which covers and protects the actuator from being actuated until the pull-of lid is removed from the full panel full-off. The thermic module may also include a filter disposed in interfering relation with the thermic module vents, including a portion between the inner and outer actuator buttons, to block egress of any particles of the solid reactant or the reaction product.

IPC 8 full level

F25D 5/00 (2006.01); **B65D 55/00** (2006.01); **F24V 30/00** (2018.01)

CPC (source: EP)

B65D 81/3484 (2013.01); **C09K 5/18** (2013.01); **F24V 30/00** (2018.04); **F25D 5/02** (2013.01); **F25D 2331/805** (2013.01)

Citation (search report)

See references of WO 2006101482A1

Cited by

US9502819B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2006101482 A1 20060928; AU 2005329458 A1 20060928; BR PI0520015 A2 20090414; CA 2605359 A1 20060928;
CN 101142456 A 20080312; EA 200702005 A1 20080428; EP 1866581 A1 20071219; IL 185995 A0 20080120; JP 2008535546 A 20080904;
MX 2007011330 A 20080313

DOCDB simple family (application)

US 2005008840 W 20050317; AU 2005329458 A 20050317; BR PI0520015 A 20050317; CA 2605359 A 20050317;
CN 200580049134 A 20050317; EA 200702005 A 20050317; EP 05729743 A 20050317; IL 18599507 A 20070917; JP 2008501852 A 20050317;
MX 2007011330 A 20050317