Title (en)

PACKAGE FOR CHANGING A STORED PRODUCT TEMPERATURE PRIOR TO THE OPENING THEREOF

Title (de

VERPACKUNG ZUR ÄNDERUNG DER TEMPERATUR EINES GELAGERTEN PRODUKTS VOR DEM ÖFFNEN

Title (fr)

EMBALLAGE PERMETTANT DE MODIFIER LA TEMPERATURE D'UN PRODUIT STOCKE AVANT SON OUVERTURE

Publication

EP 1882644 A4 20100317 (EN)

Application

EP 05851124 A 20051222

Priority

- RU 2005000657 W 20051222
- RU 2005114824 A 20050516

Abstract (en)

[origin: EP1882644A1] The invention relates to the food industry. The inventive package comprises a thermal module (3) placed in a heat insulating body (1) and having an activator including holder (5) with at least one piercing member (6) installed thereon and having a tip. Arranged in a thermal module case are: a stored product container (4) hermetically connected thereto, a solid reagent (11), and a closed compartment (9) formed of a material capable to be pierced, containing a liquid reagent (10). Recesses (14) are formed as grooves or holes at equal angular distances relative to each other in a sidewall of the thermal module case at least oppositely to the closed compartment (9) arranged therein. An internal surface area of each recess (14) is arranged at a minimum gap or closely to the closed compartment. The heat insulating body (1) is formed with a bottom (7) and a sidewall flexed at application of a radially directed external load by a user, while the holder (5) of the activator is installed to sense the external load when the sidewall of the heat insulation case flexes and to move the piercing member (6) installed on the holder (5) under action of said load in a radial direction, the tip of said piercing member being arranged in its respective recess (14) formed in the sidewall of the thermal module case oppositely of the closed compartment (9). A distance between the tip of the piercing member (6) and the closed compartment (9) with the liquid reagent (10) is smaller than a maximum flexure value of the sidewall of the heat insulating body (1).

IPC 8 full level

B65D 81/34 (2006.01); A47J 36/28 (2006.01); F24V 30/00 (2018.01)

CPC (source: EP LIS)

B65D 81/3484 (2013.01 - EP US); F24V 30/00 (2018.04 - EP US)

Citation (search report)

- [A] DE 8703340 U1 19870521
- [A] US 3970068 A 19760720 SATO SHOTARO
- [A] US 4809673 A 19890307 CHARVIN GUY [FR]
- See references of WO 2006123964A1

Cited by

EP2897510B1

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 LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

EP 1882644 A1 20080130; EP 1882644 A4 20100317; CA 2607997 A1 20061123; RU 2286934 C1 20061110; US 2010078440 A1 20100401; WO 2006123964 A1 20061123

DOCDB simple family (application)

EP 05851124 A 20051222; CA 2607997 A 20051222; RU 2005000657 W 20051222; RU 2005114824 A 20050516; US 92060605 A 20051222