Title (en)

CLOSURE SYSTEM FOR A LEAK PROOF BOTTLE FOR BABY FOOD

Title (de)

VERSCHLUSSSYSTEM FÜR EINE AUSLAUFGESCHÜTZTE FLASCHE FÜR KINDERNAHRUNG

Title (fr)

SYSTÈME DE FERMETURE POUR UNE BOUTEILLE PROTÉGÉE AU NIVEAU DE LA SORTIE POUR L'ALIMENTATION DES ENFANTS

Publication

EP 2459148 A2 20120606 (DE)

Application

EP 10751786 A 20100730

Priority

- DE 102009035598 A 20090731
- EP 2010004669 W 20100730

Abstract (en)

[origin: WO2011012310A2] The invention relates to a closure system for a leak proof bottle for baby food comprising: a lower closure ring with a substantially cylindrical lower shell part with an inner thread that can be screwed on an outer thread of a bottle, and a separating wall that is connected to the lower shell part above the inner thread on the edge and closing off the cross section thereof with a first upper side and a first bottom side and at least one lower through flow hole ending in the first upper side and in the first bottom side; an upper closure ring comprising a substantially cylindrical upper shell part with an outer thread for connecting to a screw ring for fastening a drinking nipple on the upper edge of the upper shell part and an upper separating wall that is connected on the edge to the upper shell part and sealingly closing off the cross section thereof with a second upper side and a second bottom side located on the first upper side and at least one upper through flow hole ending in the second bottom side and in the second upper side; closure elements that close off the lower closure ring and the upper closure ring relative to each other in a rotatable and detachable manner; wherein on the first upper side, at least one circular lip seal made of a soft elastic material that is concentric in relation to the bottom shell part with at least one axially aligned sealing lip is arranged and on the second bottom side, at least one circular sealing geometry that is engaged to the lip seal and concentric to the upper shell part is arranged or vice versa and optionally the upper through flow hole can be brought in overlapping and non-overlapping positions in relation to the lower through flow hole by rotating the upper closure ring in relation to the lower closure ring.

IPC 8 full level

A61J 11/04 (2006.01)

CPC (source: EP US)

A61J 11/04 (2013.01 - EP US)

Citation (search report)

See references of WO 2011012310A2

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)

DE 202009013988 U1 20100225; BR 112012002273 A2 20160614; CN 102470076 A 20120523; CN 102470076 B 20141105; DE 102009035598 A1 20110210; DE 102009035598 B4 20110414; EP 2459148 A2 20120606; EP 2459148 B1 20130501; ES 2420883 T3 20130827; JP 2013500750 A 20130110; JP 5379306 B2 20131225; RU 2012105673 A 20130910; RU 2510261 C2 20140327; US 2012175335 A1 20120712; US 8528756 B2 20130910; WO 2011012310 A2 20110203; WO 2011012310 A3 20110616

DOCDB simple family (application)

DE 202009013988 Ú 20090731; BR 112012002273 A 20100730; CN 201080033960 A 20100730; DE 102009035598 A 20090731; EP 10751786 A 20100730; EP 2010004669 W 20100730; ES 10751786 T 20100730; JP 2012522030 A 20100730; RU 2012105673 A 20100730; US 201013387650 A 20100730