

Title (en)

SCREW CAP FOR PRESSURISED CONTAINERS

Title (de)

SCHRAUBKAPPE FÜR UNTER DRUCK STEHENDE BEHÄLTER

Title (fr)

BOUCHON A VIS POUR CONTENANTS SOUS PRESSION

Publication

EP 1545998 A1 20050629 (DE)

Application

EP 03770880 A 20030924

Priority

- DE 0303169 W 20030924
- DE 10245595 A 20020930

Abstract (en)

[origin: WO2004031045A1] The invention relates to a screw cap for containers with a threaded neck, in particular PET bottles designed to hold beverages containing CO₂. Said cap comprises a top plate (1), an approximately cylindrical cap jacket (2), provided with an interior thread (3), an approximately cylindrical inner sealing collar (4), emanating from the top plate (1) and having an annular continuous region that projects radially outwards and an essentially cylindrical outer sealing collar (5), which concentrically surrounds the inner sealing collar (4). The maximum outer radius of the inner sealing collar and the minimum inner radius of the outer sealing collar differ only slightly, preferably by less than 2 mm and in particular by less than 1 mm and the inner and outer sealing collars (4, 5) are designed to receive the upper region of a bottle neck (11) in the annular gap formed between said collars. The aim of the invention is to provide a screw cap, which in general retains the excellent sealing properties of the known screw cap, even in extreme environmental conditions and is at the same time capable of limiting the pressures that occur in a container with a screw cap, without losing its sealing function. To achieve this, the cap is provided with devices (6, 7), which limit the axial depth of penetration of the edge of a bottle neck (11) into the gap between the inner (4) and the outer sealing collar (5).

IPC 1-7

B65D 41/04

IPC 8 full level

B65D 41/04 (2006.01)

CPC (source: EP US)

B65D 41/0421 (2013.01 - EP US)

Citation (search report)

See references of WO 2004031045A1

Designated contracting state (EPC)

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

DOCDB simple family (publication)

WO 2004031045 A1 20040415; AT E398583 T1 20080715; AU 2003280289 A1 20040423; BR 0314806 A 20050802; CA 2496832 A1 20040415; DE 10245595 A1 20040408; DE 50310013 D1 20080731; EP 1545998 A1 20050629; EP 1545998 B1 20080618; PL 374268 A1 20051003; RU 2005113687 A 20060710; US 2005247663 A1 20051110; ZA 200501878 B 20060531

DOCDB simple family (application)

DE 0303169 W 20030924; AT 03770880 T 20030924; AU 2003280289 A 20030924; BR 0314806 A 20030924; CA 2496832 A 20030924; DE 10245595 A 20020930; DE 50310013 T 20030924; EP 03770880 A 20030924; PL 37426803 A 20030924; RU 2005113687 A 20030924; US 52859505 A 20050321; ZA 200501878 A 20050304