

Title (en)  
Protected closure system for test tubes

Title (de)  
Geschütztes Verschlusssystem für Laborröhrchen

Title (fr)  
Système de fermeture protégé pour éprouvettes

Publication  
**EP 1375376 B1 20070530 (DE)**

Application  
**EP 03001342 A 20030123**

Priority  
IT VI20020131 A 20020617

Abstract (en)  
[origin: US2003231988A1] Protected stopper for test-tubes, which comprises a substantially cylindrically extending elastomer inner body (3) which can be arranged so as to close a test-tube (2) and is provided with a sealing portion (4) formed so as to be inserted inside the mouth of the test-tube (2) and a collar piece (5) connected above the sealing portion and projecting radially with respect to the latter so as to receive, in bearing contact therewith, the mouth of said test-tube (2). The stopper (1) comprises moreover a substantially cylindrical cover (6) made of plastic, closed at the top and mounted so as to cover the inner body. Engaging means for simultaneously securing the inner body to the cover and the whole stopper to the test-tube (2) are envisaged. These engaging means consist of a plurality of projections (11) which extend on the inside of the side wall of the cover (2), come into contact with the outer wall of the test-tube (2) and are spaced from the closing wall of the cover (6) so as to form a contact step capable of constraining the projecting collar piece (5) of the inner body (3).

IPC 8 full level  
**B65D 51/00** (2006.01); **B01L 3/14** (2006.01)

CPC (source: EP US)  
**B01L 3/50825** (2013.01 - EP US); **B01L 2200/026** (2013.01 - EP US); **B01L 2300/042** (2013.01 - EP US)

Cited by  
EP2833795B1

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 SE SI SK TR

DOCDB simple family (publication)  
**US 2003231988 A1 20031218; US 7198757 B2 20070403**; AT E363440 T1 20070615; DE 20301029 U1 20030731; DE 50307353 D1 20070712; EP 1375376 A1 20040102; EP 1375376 B1 20070530; ES 2286337 T3 20071201; IT VI20020131 A1 20031217; PT 1375376 E 20070716; SI 1375376 T1 20071031

DOCDB simple family (application)  
**US 46272003 A 20030617**; AT 03001342 T 20030123; DE 20301029 U 20030123; DE 50307353 T 20030123; EP 03001342 A 20030123; ES 03001342 T 20030123; IT VI20020131 A 20020617; PT 03001342 T 20030123; SI 200330876 T 20030123