Title (en)
   CONTAINER CLOSURE

Title (de)
   BEHÄLTERVERSCHLUSS

Title (fr)
   SYSTEME DE BOUCHAGE DE RECIPIENT

Publication
   EP 0977702 A1 20000209 (DE)

Application
   EP 98921481 A 19980422

Priority
   • DE 19717619 A 19970425
   • EP 9802382 W 19980422

Abstract (en)
   [origin: US6357494B1] A description is given of a container closure for filling and emptying containers, in particular drum-like transporting containers, which can be inserted in an exchangeable manner into a container opening, which receives a plug head. The container closure has a riser tube, which is connected to the plug head, and a removal connection element, it being the case that the latter can be locked to the plug head by means of a stud coding system which has coding studs and matching coding recesses. According to the invention, the coding studs are provided on a first securing part and the coding recesses are provided on a second securing part. One of the securing parts is designed as an annular disc, which can separately be fitted loosely, such that it cannot slip off, onto the modular removal connection element. The other of the securing parts is integrated in the plug head. The container closure described avoids mix-up of chemicals, permits simultaneous liquid removal and ventilation, and, while complying with the regulations for licensing hazardous substances, can be connected to commercially available containers or drums.

IPC 1-7
   B67D 5/33; B67D 1/08

IPC 8 full level
   B67D 1/08 (2006.01); **B67D 7/02** (2010.01); **B67D 7/34** (2010.01)

CPC (source: EP KR US)
   B67D 1/0802 (2013.01 - EP US); **B67D 1/0829** (2013.01 - EP US); **B67D 7/0288** (2013.01 - EP US); **B67D 7/34** (2013.01 - KR); **B67D 7/344** (2013.01 - EP US); B65D 2231/005 (2013.01 - EP US)

Cited by
   DE102013109799A1; EP2848583A1; DE102013110020A1; EP4249390A1; WO2015032604A1; US9828232B2; DE102020214666A1; DE102021116140A1; US11655136B2; DE102022106845A1

Designated contracting state (EPC)
   AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)
   WO 9849090 A1 19981105; AT E207852 T1 20011115; AU 7431698 A 19981124; DE 59801967 D1 20011206; DK 0977702 T3 20020211; EP 0977702 A1 20000209; EP 0977702 B1 20011031; ES 2167076 T3 20020501; KR 100558084 B1 20060310; KR 20010020262 A 20010315; MY 132940 A 20071031; PT 977702 E 20020429; TW 442431 B 20010623; US 6357494 B1 20020319

DOCDB simple family (application)
   EP 9802382 W 19980422; AT 98921481 T 19980422; AU 7431698 A 19980422; DE 59801967 T 19980422; DK 98921481 T 19980422; EP 98921481 A 19980422; ES 98921481 T 19980422; KR 19997009862 A 19991025; MY PI9801846 A 19980424; PT 98921481 T 19980422; TW 87106437 A 19980427; US 40341399 A 19991223