

Title (en)

Container closure with perforable seal

Title (de)

Behälterverschluss mit durchstossbarem Verschlusskörper

Title (fr)

Fermeture de récipient avec bouchon perforable

Publication

EP 0509281 B1 19960821 (DE)

Application

EP 92105139 A 19920325

Priority

DE 4112209 A 19910413

Abstract (en)

[origin: EP0509281A2] The invention relates to a container closure with a perforable seal (1) for removing or adding liquids by means of a blunt hollow needle (10) from or into a container (3), said seal consisting at least partially of a highly elastic material which is grooved to at least 75% of its thickness at the perforation point (23). In this case, the closure can be constructed independently in the form of a stopper or as an insertion plate for a closure.

IPC 1-7

B65D 41/58; B65D 47/36; A61M 5/162

IPC 8 full level

B65D 39/04 (2006.01); **A61M 5/162** (2006.01); **B65D 41/58** (2006.01); **B65D 47/36** (2006.01); **B65D 51/00** (2006.01); **B65D 51/18** (2006.01)

CPC (source: EP US)

B65D 51/002 (2013.01 - EP US)

Cited by

EP1652787A1; US5433330A; FR2772727A1; EP0675830A4; US6056985A; JP2010511171A; DE102004052082A1; JP2002541029A; DE102012007887A1; US9063108B2; EP3563929A1; GB2451407A; AT500525A1; CH691122A5; GB2451407B; WO9403373A1; WO9817146A3; WO9504511A1; EP1046915A2; US6866820B1; US7934614B2; WO2008068663A1; WO9722537A1; WO2007145767A3; WO0059796A1; WO0059797A1

Designated contracting state (EPC)

AT BE CH DE DK ES FR GB IT LI NL PT SE

DOCDB simple family (publication)

EP 0509281 A2 19921021; EP 0509281 A3 19930310; EP 0509281 B1 19960821; AT E141568 T1 19960915; AU 1482192 A 19921015; AU 663314 B2 19951005; CA 2065925 A1 19921014; CA 2065925 C 20050614; DE 4112209 A1 19921015; DE 59206931 D1 19960926; DK 0509281 T3 19970106; ES 2092589 T3 19961201; JP H05124664 A 19930521; US 6024235 A 20000215

DOCDB simple family (application)

EP 92105139 A 19920325; AT 92105139 T 19920325; AU 1482192 A 19920410; CA 2065925 A 19920413; DE 4112209 A 19910413; DE 59206931 T 19920325; DK 92105139 T 19920325; ES 92105139 T 19920325; JP 9059592 A 19920410; US 34720194 A 19941121