

Title (en)
VIAL RUBBER-STOPPER

Title (de)
GUMMISTOPFEN FÜR EIN FLÄSCHCHEN

Title (fr)
BOUCHON DE CAOUTCHOUC POUR FLACON

Publication
EP 2206654 A1 20100714 (EN)

Application
EP 08838829 A 20081020

Priority

- JP 2008069393 W 20081020
- JP 2007270871 A 20071018

Abstract (en)
There is provided a rubber stopper used to seal an opened portion of vials and syringes for keeping medical liquid and, in particular, to a rubber stopper in which stoppering properties can be improved without damaging sealing properties in the absence of silicone coating. A vial rubber stopper 1 comprises a disc-like top portion 3 and a cylindrical leg portion 2 of smaller diameter compared with that of the disc-like top portion, which is protruded from a bottom surface of the disc-like top portion 3 to shape into a flange 2A upward. An under-flange ring portion 3A connected to a flange bottom surface 2B is divided on an outer peripheral surface of the cylindrical leg portion 2, and the first ring-like raised portion 3B and the second ring-like raised portion 3C are formed downward of the under-flange ring portion 3A in the circumferential direction. An upper surface of the disc-like top portion 3 including a flange-upper surface, a maximum diametral portion of a flange-peripheral surface, a bottom surface of the disc-like top portion 3 located inside of the cylindrical leg portion 2 and a surface of the cylindrical leg portion 2 other than the under-flange ring portion 3A are laminated with a synthetic resin to leave the flange bottom surface and the surface of the under-flange ring portion 3A as a naked rubber stock.

IPC 8 full level
B65D 39/04 (2006.01); **A61J 1/05** (2006.01)

CPC (source: EP US)
B65D 39/0023 (2013.01 - EP US); **A61J 1/1468** (2015.05 - EP US); **B65D 2539/003** (2013.01 - EP US); **B65D 2539/008** (2013.01 - EP US)

Cited by
CN102813522A; US10124534B2; CN106256707A

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA MK RS

DOCDB simple family (publication)
EP 2206654 A1 20100714; EP 2206654 A4 20110105; EP 2206654 B1 20150708; DK 2206654 T3 20150824; ES 2545204 T3 20150909;
HU E026463 T2 20160530; JP 5479104 B2 20140423; JP WO2009051282 A1 20110303; US 2010206836 A1 20100819;
WO 2009051282 A1 20090423

DOCDB simple family (application)
EP 08838829 A 20081020; DK 08838829 T 20081020; ES 08838829 T 20081020; HU E08838829 A 20081020; JP 2008069393 W 20081020;
JP 2009538288 A 20081020; US 73418608 A 20081020