

Title (en)  
IMPROVEMENTS IN RESIN-LAMINATED RUBBER STOPPERS

Publication  
**EP 0294127 A3 19900530 (EN)**

Application  
**EP 88304894 A 19880527**

Priority  
JP 13129787 A 19870529

Abstract (en)  
[origin: EP0294127A2] The stopper has a head portion (1) the upper surface of which is laminated with a fluorine resin film (G1), and a body portion (2) protruding from the head, the body portion being inserted into the vial, and being partly or completely laminated with a fluorine resin film (G2). The resin laminated rubber stopper (c) for a medical vial or bottle (A), has better sliding and mechanical transporting properties and reduced contamination due to fine particles from silicone oils and needle piercing fragments.

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IPC 8 full level  
**B65D 39/04** (2006.01); **A61J 1/05** (2006.01); **B65D 39/18** (2006.01); **B65D 51/00** (2006.01); **B65D 51/18** (2006.01)

CPC (source: EP)  
**B65D 51/002** (2013.01)

Citation (search report)

- [Y] EP 0148426 A2 19850717 - WIMMER PHARMA GUMMI GMBH [DE]
- [Y] US 4499148 A 19850212 - GOODALE ROBERT H [US], et al
- [A] EP 0172613 A2 19860226 - DAIKYO GOMU SEIKO KK [JP]

Cited by  
WO2023186979A1; CN103271822A; EP0814027A1; EP0639114A4; CN113474083A; US2009297442A1; EP1760002A1; US2009202759A1; US9056447B2; EP1792657A1; EP1228973A1; CN111961372A; EP0564037A1; AU666910B2; US2010206836A1; AU2011317649B2; EA026876B1; US5064083A; CN105106982A; EP4253276A1; US10328164B2; US6286699B1; WO2004060764A1; WO2010108450A1; US6645635B2; WO2020002436A1; FR3082729A1; WO0122998A1; WO2012052394A1; US8512691B2; US8512692B2; US8932574B2; US9522174B2; US9066895B2; US9938055B2

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