

Title (en)

LIQUID SAMPLING APPARATUS AND METHOD OF USING SAME

Title (de)

FLÜSSIGKEITSPROBENENTNAHMEVORRICHTUNG UND DIESE VERWENDENDEERFAHREN

Title (fr)

APPAREIL D'ECHANTILLONNAGE DE LIQUIDES ET SON PROCEDE D'UTILISATION

Publication

**EP 1749421 A4 20100616 (EN)**

Application

**EP 05725009 A 20050307**

Priority

- US 2005007605 W 20050307
- US 55074304 P 20040305

Abstract (en)

[origin: US2005209531A1] A sampling apparatus includes an ampoule barrel for receiving an ampoule through a first opening, the ampoule barrel comprising a second opening adapted to flow a liquid into the ampoule barrel and a structure adapted break a frangible tip of the ampoule.

IPC 8 full level

**B65D 81/00** (2006.01); **A61B 10/00** (2006.01); **B01L 3/14** (2006.01); **G01N 1/14** (2006.01); **A61B 19/00** (2006.01)

CPC (source: EP KR US)

**A61B 10/0045** (2013.01 - EP US); **B01L 3/50825** (2013.01 - EP US); **G01N 1/02** (2013.01 - KR); **G01N 1/10** (2013.01 - KR); **G01N 1/14** (2013.01 - EP US); **A61B 10/00** (2013.01 - EP US); **A61B 2017/00561** (2013.01 - EP US); **A61B 2090/037** (2016.02 - EP US); **B01L 2200/0642** (2013.01 - EP US); **B01L 2300/041** (2013.01 - EP US); **B01L 2300/0835** (2013.01 - EP US); **B01L 2400/0683** (2013.01 - EP US); **G01N 2001/1418** (2013.01 - EP US)

Citation (search report)

- [XYI] US 3626762 A 19711214 - GILFORD SAUL R
- [X] US 5221311 A 19930622 - RISING PETER E [US], et al
- [YD] US 5935799 A 19990810 - ISBISTER JENEFIR D [US]
- [A] US 4332769 A 19820601 - RAMPY GORDON A, et al
- [A] US 3634038 A 19720111 - RAMPY GORDON A
- See references of WO 2005086816A2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

**US 2005209531 A1 20050922**; AU 2005220891 A1 20050922; BR PI0508120 A 20070710; CA 2610629 A1 20050922; EP 1749421 A2 20070207; EP 1749421 A4 20100616; IL 177835 A0 20070308; IL 177835 A 20101130; JP 2007527998 A 20071004; KR 20060135015 A 20061228; NO 20064455 L 20061002; RU 2006135014 A 20080410; WO 2005086816 A2 20050922; WO 2005086816 A3 20070524; ZA 200607870 B 20080827

DOCDB simple family (application)

**US 7446605 A 20050307**; AU 2005220891 A 20050307; BR PI0508120 A 20050307; CA 2610629 A 20050307; EP 05725009 A 20050307; IL 17783506 A 20060831; JP 2007502112 A 20050307; KR 20067020499 A 20060929; NO 20064455 A 20061002; RU 2006135014 A 20050307; US 2005007605 W 20050307; ZA 200607870 A 20060920