Title (en)

PIPETTE FOR WITHDRAWING LIQUID BY BACK AND FORTH MOTION OF THE PISTON

Title (de)

PIPETTE ZUR FLÜSSIGKEITSENTNAHME MITTELS RÜCKWARTS- UND VORWÄRTSBEWEGUNG DES KOLBENS

Title (fr)

PIPETTE PERMETTANT UN PRELEVEMENT DE LIQUIDE PAR MOUVEMENT DE VA-ET-VIENT DU PISTON

Publication

EP 2162217 A1 20100317 (FR)

Application

EP 08785880 A 20080625

Priority

- EP 2008058090 W 20080625
- FR 0756008 A 20070625

Abstract (en)

[origin: CA2691370A1] The present invention relates to a withdrawal pipette (100) designed so t hat the movement of a piston (12) along one of its sliding directions (36, 3 8) simultaneously leads to the increase of the volume in a lower chamber (20) and the reduction of the volume in an upper chamber (22), and vice versa, the pipette additionally comprising fluid communication means (40) that alte rnately make it possible to establish a first fluid communication (A) betwee n the lower chamber (20) and a channel emerging from a nozzle (28) isolated from this lower chamber, and a second fluid communication (B) between the up per chamber (22) and this same channel (28).

IPC 8 full level

B01L 3/02 (2006.01)

CPC (source: EP US)

B01L 3/0227 (2013.01 - EP US); B01L 2200/0621 (2013.01 - EP US); B01L 2400/0478 (2013.01 - EP US); B01L 2400/06 (2013.01 - EP US); B01L 2400/0622 (2013.01 - EP US)

Citation (search report)

See references of WO 2009000860A1

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)

FR 2917648 A1 20081226; **FR 2917648 B1 20090925**; BR PI0813476 A2 20150106; CA 2691370 A1 20081231; CA 2691370 C 20150616; CN 101687193 A 20100331; CN 101687193 B 20130515; EP 2162217 A1 20100317; EP 2162217 B1 20120829; ES 2394255 T3 20130130; JP 2010531440 A 20100924; JP 5114559 B2 20130109; KR 101449086 B1 20141008; KR 20100049031 A 20100511; PL 2162217 T3 20130228; US 2010132486 A1 20100603; US 8117927 B2 20120221; WO 2009000860 A1 20081231

DOCDB simple family (application)

FR 0756008 A 20070625; BR PI0813476 A 20080625; CA 2691370 A 20080625; CN 200880022088 A 20080625; EP 08785880 A 20080625; EP 2008058090 W 20080625; ES 08785880 T 20080625; JP 2010512718 A 20080625; KR 20107001014 A 20080625; PL 08785880 T 20080625; US 63868209 A 20091215