

Title (en)
MICROVOLUME LIQUID DISPENSING

Title (de)
DOSIERUNG VON MIKROFLÜSSIGKEITSMENGEN

Title (fr)
DISTRIBUTION DE LIQUIDE EN MICROVOLUME

Publication
EP 1261430 A2 20021204 (EN)

Application
EP 01913075 A 20010227

Priority

- US 0106174 W 20010227
- US 18581000 P 20000229
- US 59180300 A 20000612
- US 59180700 A 20000612

Abstract (en)
[origin: WO0164345A2] A sealed reservoir (21) for integrated packaging, shipping, storage and precise dispensing of extremely small volumes of liquids includes an integrated metering tap. The tap has a metering tube (25), which is translatable between a fill position inside the reservoir and an expel position outside the reservoir. The metering tube (25) includes a tube end closure (31) in a lower portion of the tube, a port (32) above the tube end closure, and a piston (29) in an upper portion of the tube. The piston (29) is movable between a down position that seals the side port (32) and an up position above the port (32). Movement of the piston (29) from the up position to the down position can displace from 10 nanoliters to 20 microliters. Several such dispensers are arranged in an integrated array of reservoir/tap units (20) suitable for use in automated, multi-well formats such as those commonly used for high-throughput screening.

IPC 1-7
B01L 11/00; G01N 35/10; B01J 19/00; B01L 3/02

IPC 8 full level
B01J 19/00 (2006.01); **B01L 3/02** (2006.01); **B01L 99/00** (2010.01); **G01N 35/10** (2006.01); **C40B 60/14** (2006.01)

CPC (source: EP)
B01J 19/0046 (2013.01); **B01L 3/0265** (2013.01); **B01L 3/0293** (2013.01); **G01N 35/1002** (2013.01); **G01N 35/1074** (2013.01); **B01J 2219/00315** (2013.01); **B01J 2219/00317** (2013.01); **B01J 2219/00353** (2013.01); **B01J 2219/00364** (2013.01); **B01L 2200/0605** (2013.01); **C40B 60/14** (2013.01)

Citation (search report)
See references of WO 0164345A2

Designated contracting state (EPC)
AT BE CH DE GB LI

DOCDB simple family (publication)
WO 0164345 A2 20010907; **WO 0164345 A3 20020131**; AU 4178001 A 20010912; EP 1261430 A2 20021204

DOCDB simple family (application)
US 0106174 W 20010227; AU 4178001 A 20010227; EP 01913075 A 20010227