

Title (en)

Repeating manually operable device for dispensing and/or withdrawing liquids

Title (de)

Repetierend manuell zu betätigende Abgabe-und/oder Aufnahmeeinrichtung für Flüssigkeiten

Title (fr)

Dispositif à actionnement manuel pour distribuer et/ou prélever des liquides

Publication

EP 1177831 A3 20030625 (DE)

Application

EP 01117322 A 20010718

Priority

DE 10038569 A 20000803

Abstract (en)

[origin: EP1177831A2] A repeating removal and/or receiving device (1) comprises an adjusting device (4), a motor drive unit (5) and a control unit (6) for the drive; a manually operated operating element (8); and a programming element for the control unit. A liquid amount is adjusted in the control unit using the programming element and a process interval for a number of process steps can be adjusted in the control unit. The process interval is determined by the control unit by evaluating the time distance arising during previous single or multiple triggering of one process step. Preferred Features: The operating element operates according to a computer mouse with a single click for a single operation and a double click for a continuous operation.

IPC 1-7

B01L 3/02; **G01F 11/02**

IPC 8 full level

G01N 1/00 (2006.01); **B01J 4/02** (2006.01); **B01L 3/02** (2006.01); **G01F 11/02** (2006.01)

CPC (source: EP US)

B01L 3/0234 (2013.01 - EP US); **B01L 2300/027** (2013.01 - EP US)

Citation (search report)

- [AD] DE 19513023 A1 19961010 - HIRSCHMANN GLASGERAETE [DE]
- [A] US 5509318 A 19960423 - GOMES FRANCIS [US]
- [A] US 4671123 A 19870609 - MAGNUSSEN JR HAAKON T [US], et al

Cited by

CN103547371A; FR3063431A1; US8594608B2; WO2012158783A1

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

EP 1177831 A2 20020206; **EP 1177831 A3 20030625**; **EP 1177831 B1 20041006**; AT E278470 T1 20041015; DE 10038569 A1 20020221; DE 10038569 C2 20020704; DE 50103955 D1 20041111; JP 2002126492 A 20020508; US 2002018734 A1 20020214; US 6841129 B2 20050111

DOCDB simple family (application)

EP 01117322 A 20010718; AT 01117322 T 20010718; DE 10038569 A 20000803; DE 50103955 T 20010718; JP 2001236516 A 20010803; US 91994401 A 20010802