

Title (en)
LIQUID DISPENSING DEVICE

Title (de)
FLÜSSIGKEITSSPENDER

Title (fr)
DISPOSITIF DE DISTRIBUTION DE LIQUIDE

Publication
EP 3638617 B1 20220119 (EN)

Application
EP 18735106 A 20180608

Priority
• US 201715625453 A 20170616
• US 2018036716 W 20180608

Abstract (en)
[origin: WO2018231650A1] A liquid dispensing device includes a needle. The needle is adapted to penetrate a container without tearing out a portion of the container. The portion of the container is near a point of penetration on the container. The liquid dispensing device includes a motion control system. The motion control system is configured to rotate the needle while the needle penetrates the container.

IPC 8 full level
B67D 1/04 (2006.01); **B67D 1/08** (2006.01)

CPC (source: EP KR)
B67B 7/26 (2013.01 - EP); **B67D 1/0004** (2013.01 - EP KR); **B67D 1/0412** (2013.01 - EP KR); **B67D 1/0857** (2013.01 - KR); **B67D 1/0884** (2013.01 - KR); **B67D 1/0885** (2013.01 - EP KR); **B67D 1/0888** (2013.01 - KR); **B67D 1/1236** (2013.01 - KR); **B67D 1/07** (2013.01 - EP); **B67D 1/0857** (2013.01 - EP); **B67D 1/0884** (2013.01 - EP); **B67D 1/0888** (2013.01 - EP); **B67D 1/1234** (2013.01 - EP); **B67D 1/1236** (2013.01 - EP); **B67D 2001/0824** (2013.01 - EP KR); **B67D 2210/00091** (2013.01 - EP KR); **B67D 2210/00104** (2013.01 - EP KR)

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
WO 2018231650 A1 20181220; CN 110997554 A 20200410; CN 110997554 B 20211130; EP 3638617 A1 20200422; EP 3638617 B1 20220119; ES 2909603 T3 20220509; KR 102416752 B1 20220704; KR 20200018196 A 20200219

DOCDB simple family (application)
US 2018036716 W 20180608; CN 201880052648 A 20180608; EP 18735106 A 20180608; ES 18735106 T 20180608; KR 20187028093 A 20180608