

Title (en)
DROPPER MACHINE

Title (de)
TROPFENMASCHINE

Title (fr)
MACHINE DE DEPOT

Publication
EP 3415877 B8 20200304 (EN)

Application
EP 18177309 A 20180612

Priority
LU 100315 A 20170614

Abstract (en)
[origin: EP3415877A1] A dropper machine for pouring a measured amount of a substance in a plurality of receptacles (R), comprising: - a support structure (4), - a reservoir (6) containing the substance to be dropped, supported by said structure, - a plurality of cylinder (10) and piston (12) metering devices (8) with an inlet (18) positioned below the level of the substance to be dropped into the reservoir (6) and an outlet (10a) communicating with a respective dropper nozzle (16), - at least one drive unit (100A, 100B) arranged to simultaneously drive the piston of said metering devices (8) according to a forward and backward motion between a start position and an end position where the displacement of the pistons (12) from the end position to the start position causes the suction of the substance to be dropped from the reservoir (6) to the cylinder (10) of the metering devices and the displacement of the pistons (12) from the start position to the end position is adapted to cause the delivery of the substance to be dropped through the respective nozzles (16), characterized in that to each of said metering devices (8) is associated a respective actuating device (24) cooperating with the piston (12) of said metering device, said actuator device being operable individually to inhibit the delivery of the substance to be dropped through said nozzle (16) when the drive unit (100A, 100B) is actuated to cause displacement of the pistons of the metering devices associated therewith between the start position and the end position.

IPC 8 full level
G01F 11/00 (2006.01); **A23G 1/20** (2006.01); **A23G 3/02** (2006.01); **A23G 3/20** (2006.01); **B65B 3/32** (2006.01); **B65B 37/06** (2006.01); **B65B 37/20** (2006.01); **G01F 11/02** (2006.01)

CPC (source: CN EP KR US)
A21B 5/00 (2013.01 - KR); **A21B 7/00** (2013.01 - KR); **A21D 13/19** (2017.01 - KR); **A23G 1/206** (2013.01 - EP US); **A23G 3/0257** (2013.01 - EP US); **A23G 3/203** (2013.01 - EP US); **B65B 3/04** (2013.01 - CN); **B67D 3/0003** (2013.01 - US); **B67D 3/0045** (2013.01 - US); **B67D 3/0074** (2013.01 - US); **B67D 3/009** (2013.01 - US); **G01F 11/003** (2013.01 - EP US); **G01F 11/023** (2013.01 - EP US); **G01F 11/029** (2013.01 - EP US)

Cited by
US12035741B2; EP4101307A1; EP4101308A3; IT202100015269A1

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)
EP 3415877 A1 20181219; **EP 3415877 B1 20200101**; **EP 3415877 B8 20200304**; CA 3008455 A1 20181214; CN 109080865 A 20181225; CN 109080865 B 20211029; KR 102653393 B1 20240402; KR 20180136411 A 20181224; LU 100315 B1 20181218; PL 3415877 T3 20200824; US 10865094 B2 20201215; US 2018362325 A1 20181220

DOCDB simple family (application)
EP 18177309 A 20180612; CA 3008455 A 20180613; CN 201810612286 A 20180614; KR 20180068339 A 20180614; LU 100315 A 20170614; PL 18177309 T 20180612; US 201816007444 A 20180613