

Title (en)
PIPETTE FOR ACTIVATING A SYRINGE

Title (de)
PIPETTE ZUM BETÄTIGEN EINER SPRITZE

Title (fr)
PIPETTE SERVANT À FAIRE FONCTIONNER UNE SERINGUE

Publication
EP 3164214 B1 20180919 (DE)

Application
EP 15732592 A 20150623

Priority
• DE 102014109345 A 20140704
• EP 2015064076 W 20150623

Abstract (en)
[origin: WO2016001010A1] Pipette for activating a syringe comprising – a rod-shaped housing, – a first receptacle with a first opening at the lower end of the housing for inserting a first fastening section at the upper edge of a cylinder of the syringe, – a receiving body with a second receptacle and a second opening at the lower end in the housing for inserting a second fastening section at a piston of the syringe, – first means for detachably holding the first fastening section in the first receptacle, – second means for detachably holding the second fastening section in the second receptacle, – first means for displacing the receiving body in the housing away from the first receptacle, – second means for displacing the receiving body toward the first receptacle in steps with a step size corresponding to the volume of liquid to be discharged from the syringe during the steps, – an actuatable operating element outside of the housing for carrying out individual steps, – a toothed rack with a toothing, arranged in the housing and connected to the receiving body, – a pawl, pivotably mounted on the operating element in the housing, which engages with the toothing of the toothed rack during downward displacement of the operating element and carries the same along, and which disengages with the toothing during upward displacement of the operating element, – an adjustable adjusting element outside of the housing for adjusting the step size of the steps, – a cover arranged displaceably on the toothed rack on the side of the pawl and comprising a detaining surface facing the pawl for preventing the pawl from engaging in the toothing and comprising a catching edge on the lower end, beneath which catching edge the toothing is uncovered for engagement by the pawl, – a coupling element arranged on the cover and coupled to the adjusting element in order to transmit an adjustment of the adjusting element to the cover, – wherein the cover has a first cover part made of plastic which comprises the coupling element and a longitudinal slot, and a second cover part made of sheet metal, held on the lower cover part, and which comprises a bend arranged in the longitudinal slot and a spring finger connected to the bend, – the catching edge is formed on the first cover part, – the toothed rack has a protruding notch on the side facing away from the cover which notch meets the bend in the longitudinal slot at the end of the displacement of the receiving body toward the first receptacle, by which means the spring finger is deflected and the pawl is prevented by the spring finger from a further engagement in the toothing of the toothed rack, and – the second cover part, with the exception of a section comprising at least the bend and spring finger, is overmoulded by the plastic of the first cover part in a defined position of the bend with respect to the coupling element, and by this means the first cover part and the second cover part are fixedly connected to each other.

IPC 8 full level
B01L 3/02 (2006.01)

CPC (source: CN EP US)
B01L 3/0234 (2013.01 - CN EP US); **B01L 2200/025** (2013.01 - CN EP US); **B01L 2200/12** (2013.01 - CN EP US)

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)
DE 102014109345 A1 20160107; CN 106470760 A 20170301; CN 106470760 B 20190607; EP 3164214 A1 20170510;
EP 3164214 B1 20180919; JP 2017523029 A 20170817; JP 6595518 B2 20191023; PL 3164214 T3 20190228; US 10507463 B2 20191217;
US 2017151556 A1 20170601; WO 2016001010 A1 20160107

DOCDB simple family (application)
DE 102014109345 A 20140704; CN 201580034848 A 20150623; EP 15732592 A 20150623; EP 2015064076 W 20150623;
JP 2016575762 A 20150623; PL 15732592 T 20150623; US 201515322552 A 20150623