

Title (en)
DEVICE FOR MOUNTING PIPETTE TIPS, PIPETTE TIP, AND PIPETTING DEVICE

Title (de)
VORRICHTUNG ZUR HALTERUNG VON PIPETTENSPIZTEN, PIPETTENSPIITZE SOWIE PIPETTIERVORRICHTUNG

Title (fr)
DISPOSITIF DE MAINTIEN DE POINTES DE PIPETTE, POINTE DE PIPETTE AINSI QUE DISPOSITIF DE PIPETTAGE

Publication
EP 2024090 A1 20090218 (DE)

Application
EP 07725637 A 20070529

Priority
• EP 2007004746 W 20070529
• EP 06010976 A 20060529
• EP 07725637 A 20070529

Abstract (en)
[origin: EP1862219A1] The device for holding of pipette tips (10), comprises a coupling element (4) having a longitudinal axis (6) running in the axial direction, a free end (8), a sealing element (21) made of an elastic material, two axially-separated guidance elements (25, 26), a fastening element (27), and a chamfer insert (68) at the free end for pre-calibration of the pipette tip. From the free end, a pipette tip is pushed on to the coupling element in the axial direction. The elastic material has an axial, radially-extending sealing section, which freely lies in the axial direction towards the free end. The device for holding of pipette tips (10), comprises a coupling element (4) having a longitudinal axis (6) running in the axial direction, a free end (8), a sealing element (21) made of an elastic material, two axially-separated guidance elements (25, 26), a fastening element (27), and a chamfer insert (68) at the free end for pre-calibration of the pipette tip. From the free end, a pipette tip is pushed on to the coupling element in the axial direction. The elastic material has an axial, radially-extending sealing section, which freely lies in the axial direction towards the free end. A sealing section of the pipette tip is partly pressed along the axial direction against the sealing section. The guidance- and fastening element are arranged at the outer side of the coupling element. The guidance element for the lateral alignment of the pipette tip forms a radially continuous guidance ring with constant radial extension. The guidance rings have a different radial extension and are formed independent of one another. The guidance elements have an intermediate distance that is as large as the radial extension of the guidance elements, or the larger of the two guidance elements. The fastening element is arranged with the fastening means of the pipette tip for pressing the sealing section. The coupling element is arranged at a first section, which is close to the free end, and a second section, which is arranged in an axially-displaced manner with respect to the first section. The first section has a smaller radial extension than the second section. The guidance element is arranged at the first and second sections respectively, between which the sealing element is arranged. The fastening element is arranged at the second section. The sealing element is composed of a fluoroelastomer. The fastening element is a peripherally-continuous spring element, which is arranged in a peripherally-continuous recess, has radial elevations arranged in a partially or continuously circular manner and is rigid or flexible. The fastening element is arranged behind all the guidance elements when seen from the direction of attachment of the pipette tip. The sealing element is malleable along its material cross-section. Independent claims are included for: (1) pipette tip to be held by a fastening device; and (2) pipette.

IPC 8 full level
B01L 3/02 (2006.01)

CPC (source: EP KR US)
B01L 3/02 (2013.01 - KR); **B01L 3/0275** (2013.01 - EP US); **B01L 2200/0689** (2013.01 - EP US)

Citation (search report)
See references of WO 2007137818A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA HR MK RS

DOCDB simple family (publication)
EP 1862219 A1 20071205; EP 1862219 B1 20180207; BR PI0712522 A2 20120904; BR PI0712522 B1 20180807; CN 101484242 A 20090715; CN 101484242 B 20121128; DK 2024090 T3 20210920; EP 2024090 A1 20090218; EP 2024090 B1 20210630; EP 3885046 A1 20210929; ES 2886457 T3 20211220; JP 2009538725 A 20091112; JP 5511375 B2 20140604; KR 101159885 B1 20120626; KR 20090027671 A 20090317; RU 2008151740 A 20100710; RU 2424851 C2 20110727; US 2010196210 A1 20100805; US 8512650 B2 20130820; WO 2007137818 A1 20071206

DOCDB simple family (application)
EP 06010976 A 20060529; BR PI0712522 A 20070529; CN 200780025331 A 20070529; DK 07725637 T 20070529; EP 07725637 A 20070529; EP 2007004746 W 20070529; EP 21169623 A 20070529; ES 07725637 T 20070529; JP 2009512480 A 20070529; KR 20087031523 A 20070529; RU 2008151740 A 20070529; US 30274907 A 20070529