

Title (en)
DEVICE FOR HOLDING A PIPETTE TIP AND PIPETTING DEVICE

Title (de)
VORRICHTUNG ZUR HALTERUNG VON PIPETTENSPITZEN SOWIE PIPETTIERVORRICHTUNG

Title (fr)
APPAREIL POUR RETENIR UN EMBOUT À PIPETTE ET PIPETTE UTILISANT LEDIT EMBOUT

Publication
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Application
EP 06010976 A 20060529

Priority
EP 06010976 A 20060529

Abstract (en)
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.

Abstract (de)
Es wird eine Vorrichtung zur Halterung von Pipettenspitzen mit einem Koppelement (4) mit einer in axialer Richtung verlaufenden Längsachse (6) vorgeschlagen. Das Koppelement (4) weist ein freies Ende (8) auf, von dem aus eine Pipettenspitze (10) auf das Koppelement (4) in axialer Richtung aufschiebbar ist. Weiterhin weist das Koppelement (4) ein Dichtelement (21), mindestens ein Führungselement (25, 26) und ein Halteelement (27) auf. Das Dichtelement (21) besteht aus einem elastischen Material, das einen in axialer Richtung zum freien Ende (8) des Koppelements (4) hin freiliegenden axialen Dichtabschnitt (23) umfaßt, gegen den ein Dichtabschnitt (43) der Pipettenspitze (10) axial preßbar ist. Das Führungselement (25, 26) ist an der Außenseite des Koppelements (4) angeordnet und dient zum lateralen Ausrichten der Pipettenspitze. Ebenfalls an der Außenseite des Koppelements (4) befindet sich das Halteelement (27) zum Wechselwirken mit Haltemitteln (47) der Pipettenspitze (10).

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