Title (en)

Adjustment method for microtiter plate washing machines

Title (de)

Einstellverfahren für Mikroplatten-Waschgeräte

Title (fr)

Procédé de réglage pour appareils de lavage dotés de microplaquettes

Publication

## EP 2481481 B1 20140521 (DE)

Application

## EP 12151982 A 20120120

Priority

- US 201161436684 P 20110127
- CH 1352011 A 20110127

Abstract (en)

[origin: EP2481481A1] Adjusting microplate washing device (1) comprising at least one receiver (2) for receiving a microplate (3) containing a wellarray (4), a washing head (5) with washing cannulas, a working plane, a reference plane, a sensor device, and a controller, comprises (a) converging the receiver and the washing head until the lowermost ends of the washing cannulas contacts at least one surface that defines the reference plane, detecting a signal of the sensor device and thus determining a relative elevation value, and determining active elevation position of the lowermost ends of the washing cannulas. Adjusting microplate washing device (1) comprising at least one receiver (2) for receiving a microplate (3) containing a well-array (4), a washing head (5) with washing cannulas that are arranged in an array corresponding to at least one portion of the well array of the microplate, a working plane defined by the washing cannulas with their lowermost ends, a reference plane, a sensor device, and a controller that is operatively connected with the sensor device, comprises (a) converging the receiver and the washing head by moving the receiver and/or the washing head until the lowermost ends of the washing cannulas contacts at least one surface that defines the reference plane; detecting a signal of the sensor device using the controller and thus determining a relative elevation value, where the signal indicates the contacting of the surface with the lowermost ends of the washing cannulas or is usable for determining the position of the surface defining the reference plane; and determining an active elevation position of the lowermost ends of the washing cannulas with respect to an inner surface of the well bottom of the microplate, based on the relative elevation value, during the operation of the microplate washing device. The working plane and the reference plane are arranged parallel to each other. An independent claim is also included for using the microplate washing device for adjusting the microplate washing device, which comprises the receiver, the washing head, the working plane, the sensor device, the controller that is operatively connected with the sensor device, which processes the signals of the sensor device and controls the movements of the receiver and/or the washing head, and the reference plane, comprising converging the receiver and the washing head by moving the receiver and/or the washing head until the lowermost ends of the washing cannulas contact inner surfaces of the well bottoms of the microplate located in the receiver, detecting the contacting of the inner surfaces of the well bottoms with the lowermost ends of the washing cannulas by the sensor device and the controller, conducting the microplate washing device by controller, for moving the receiver and/or the washing head such that the lowermost ends of the washing cannulas are brought in an active elevation position with respect to the inner surface of the well bottoms of the microplate.

IPC 8 full level

## B01L 99/00 (2010.01); G01N 33/53 (2006.01)

CPC (source: EP US)

**B01L 9/523** (2013.01 - EP US); **B01L 13/02** (2019.07 - EP US); **B01L 2200/08** (2013.01 - EP US); **B01L 2200/14** (2013.01 - EP US); **B01L 2300/0829** (2013.01 - EP US)

Cited by

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Designated contracting state (EPC)

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EP 2481481 A1 20120801; EP 2481481 B1 20140521; CH 704388 A2 20120731; US 2012199163 A1 20120809; US 9333505 B2 20160510

DOCDB simple family (application)

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