

Title (en)  
DEVICE FOR THERMOCYCLING BIOLOGICAL SAMPLES, MONITORING INSTRUMENT COMPRISING THE SAME, AND METHOD FOR THERMOCYCLING BIOLOGICAL SAMPLES USING SUCH DEVICE

Title (de)  
VORRICHTUNG ZUR THERMOZYKLIERUNG BIOLOGISCHER PROBEN, ÜBERWACHUNGSINSTRUMENT DAMIT UND VERFAHREN ZUR THERMOZYKLIERUNG BIOLOGISCHER PROBEN MIT SOLCH EINER VORRICHTUNG

Title (fr)  
DISPOSITIF DE THERMOCYCLAGE D'ÉCHANTILLONS BIOLOGIQUES, INSTRUMENT DE SURVEILLANCE LE COMPRENANT ET PROCÉDÉ DE THERMOCYCLAGE D'ÉCHANTILLONS BIOLOGIQUES À L'AIDE D'UN TEL DISPOSITIF

Publication  
**EP 3524353 A1 20190814 (EN)**

Application  
**EP 18156326 A 20180212**

Priority  
EP 18156326 A 20180212

Abstract (en)  
The present invention provides a device for thermocycling biological samples, the device comprising a mount for receiving the biological samples, a heat pump for heating and cooling the mount, wherein the heat pump is thermally coupled to the mount, a heat sink comprising a primary heat exchanger with an inner space perfused by a heat exchanging fluid, and a secondary heat exchanger, wherein the primary heat exchanger is thermally coupled to the heat pump, and wherein the secondary heat exchanger is thermally coupled to the heat pump through the primary heat exchanger, and a control unit for controlling the thermocycling of the biological samples. The present invention further provides an instrument for simultaneously monitoring multiple nucleic acid amplification reactions during thermocycling biological samples by means of such device, and also to a method for thermocycling biological samples using such device for thermocycling biological samples.

IPC 8 full level  
**B01L 7/00** (2006.01)

CPC (source: EP)  
**B01L 7/52** (2013.01); **B01L 2200/147** (2013.01); **B01L 2300/1822** (2013.01); **B01L 2300/1844** (2013.01); **B01L 2300/185** (2013.01)

Citation (applicant)  
• WO 2006105919 A1 20061012 - ROCHE DIAGNOSTICS GMBH [DE], et al  
• WO 2013075839 A2 20130530 - INHECO IND HEATING AND COOLING GMBH [DE]

Citation (search report)  
• [X] US 2002072112 A1 20020613 - ATWOOD JOHN GIRDNER [US], et al  
• [X] WO 2014185628 A1 20141120 - MICRO DIGITAL CO LTD [KR]  
• [X] EP 2520667 A1 20121107 - APPLIED BIOSYSTEMS LLC [US]  
• [A] WO 2015039022 A2 20150319 - PHONONIC DEVICES INC [US]  
• [A] EP 2127751 A1 20091202 - ROCHE DIAGNOSTICS GMBH [DE], et al

Cited by  
WO2022129400A1; CN115301307A; EP3858487A1; WO2021195296A1

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

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**EP 3524353 A1 20190814**

DOCDB simple family (application)  
**EP 18156326 A 20180212**