

Title (en)

MICROCHIP MATRIX DEVICE FOR DUPLICATING AND CHARACTERIZING NUCLEIC ACIDS

Title (de)

MICROCHIP-MATRIX-VORRICHTUNG ZUR VERVIELFÄLTIGUNG UND CHARAKTERISIERUNG VON NUKLEINSÄUREN

Title (fr)

DISPOSITIF MATRICE A MICROCIRCUIT INTEGRE DESTINE A L'AMPLIFICATION ET A LA CHARACTERISATION D'ACIDES NUCLEIQUES

Publication

**EP 1192007 B1 20040421 (DE)**

Application

**EP 00952983 A 20000630**

Priority

- DE 19932423 A 19990702
- EP 0006103 W 20000630

Abstract (en)

[origin: WO0102094A1] The aim of the invention is to provide a device for duplicating and characterizing nucleic acids almost simultaneously and with a high sample throughput rate, hereby avoiding the disadvantages of the prior art. To this end, the inventive device consists of a chamber body (1) with a recess whose edge sealingly holds an optically transparent chip (2). Said chip holds nucleic acids in individual spots (13) on a detection surface (12). The chamber body (1) is placed on an optically transparent chamber support (5) with a bearing surface (4), in such a way that a capillary gap (7), which can be filled with a liquid sample, is formed between the detection surface (12) of the chip (2) facing towards the chamber support (5) and said chamber support (5). The chamber body (1) is provided with an inlet (81) and an outlet (82), which are spatially separate from each other, and has a space, which laterally encompasses the chip (2) and which has a gas reservoir (6). The chamber support (5) is provided with heating elements .

IPC 1-7

**B01L 3/00**

IPC 8 full level

**B01F 13/00** (2006.01); **B01L 3/00** (2006.01)

CPC (source: EP US)

**B01F 33/3031** (2022.01 - EP US); **B01L 3/5027** (2013.01 - EP US); **B01L 3/508** (2013.01 - EP US); **B01L 2200/142** (2013.01 - EP US); **B01L 2300/0636** (2013.01 - EP US); **B01L 2300/0809** (2013.01 - EP US); **B01L 2400/0406** (2013.01 - EP US); **B01L 2400/0418** (2013.01 - EP US)

Cited by

DE102012108158A1; DE102012108158B4; US9816916B2

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

**WO 0102094 A1 20010111**; **WO 0102094 A8 20010621**; AT E264718 T1 20040515; AU 6559900 A 20010122; AU 768113 B2 20031204; CA 2379125 A1 20010111; CA 2379125 C 20090407; DE 50006164 D1 20040527; EP 1192007 A1 20020403; EP 1192007 B1 20040421; ES 2219374 T3 20041201; HK 1046381 A1 20030110; IL 147227 A0 20020814; IL 147227 A 20060820; US 2002150933 A1 20021017; US 7888074 B2 20110215

DOCDB simple family (application)

**EP 0006103 W 20000630**; AT 00952983 T 20000630; AU 6559900 A 20000630; CA 2379125 A 20000630; DE 50006164 T 20000630; EP 00952983 A 20000630; ES 00952983 T 20000630; HK 02106805 A 20020917; IL 14722700 A 20000630; IL 14722701 A 20011220; US 3828402 A 20020102